



U.S. Department
of Transportation
**Federal Aviation
Administration**



SDR

Summary

Service Difficulty Reporting

April 12, 1998 - April 18, 1998

GENERAL AVIATION, ZAC-327

You can improve Air Safety by reporting the problem when you see it!

SECTION

- I Significant Occurrence Report
- II Domestic Service Difficulty Report
- III International Service Difficulty Report
- IV SDR Totals by District Office
- V Index By Aircraft Make and Model
- VI Joint Aircraft System/Component Code Table

ISSUE: 98-16



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SDR SUMMARY

General Aviation, ZAC-327



This summary includes domestic (United States) Service Difficulty Reports (SDRs) entered into the data base for aircraft weighing 12,500 lbs. and below. It also includes reports on aeronautical products (engines, propellers, and components), and all helicopters. A separate section for International SDRs for aircraft weighing 12,500 lbs. and under has also been included. Under a data exchange agreement, International SDRs are submitted to the FAA by the Civil Aviation Authority of other countries (currently, Canada - CAN, and Australia - AUS). All reports are sorted by aircraft make, model group (basic model), and Joint Aircraft System/Component (JASC) code. Within each aircraft model group, the specific model shown may vary, but similar types of reports will be grouped together and listed in ascending order by their JASC code. Each field contains all information submitted to the FAA. Some fields are not included in order to make the summary easier to read. Additional information may be obtained by referring to the "operator control number." Send your request to the Aviation Data Systems Branch, AFS-620 at the address or phone below.

The Regulatory Support Division (AFS-600) has established a "HomePage" on the Internet through which the same information is available. There is a large quantity of other information available through the AFS-600 HomePage such as the most current SDR system codes (i.e., Joint Aircraft System/Component Codes). The SDR Question and Answer Section of the Summary will also be transferred to the AFS-600 HomePage to simplify the process of preparing the SDR Summaries in the PDF format each week. There are "hot buttons" to take you to other locations and sites where FAA Flight Standards Service Information is available. The AFS-600 "HomePage" address is:

<http://www.mmac.jccbi.gov/afs/afs600>

"The Service Difficulty Reports in this publication are derived from unverified information submitted by the aviation community without FAA verification for accuracy. The number of SDRs submitted is not an indication of the mechanical reliability or fitness of an airline or individual operator, and the information should not be used as such."

Comments are welcomed and may be directed to:

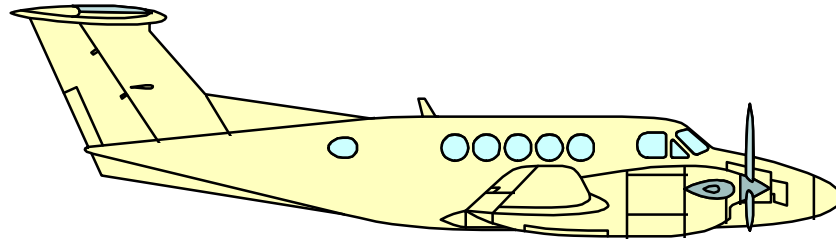
*Federal Aviation Administration
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125-5029
Phone: (405) 954-4171, Fax: (405) 954-4748*

Your continued participation is essential and is an integral part of ensuring aviation safety. Thank you for supporting the Service Difficulty Program! If you have any questions regarding this special notice you can contact John Jackson at (405) 954-6486, or Jim Gillespie at (405) 954-1141, or Blake McDonald at (405) 954-0307 in the Aviation Systems Branch (AFS-620). Their E-mail addresses are:

john_e_jackson@mmacmail.jccbi.gov

james_gillespie@mmacmail.jccbi.gov

blake_mcdonald@mmacmail.jccbi.gov



SIGNIFICANT OCCURRENCE REPORT





U.S. Department
of Transportation
**Federal Aviation
Administration**

THE SIGNIFICANT OCCURRENCE REPORT



The Significant Occurrence Report is a compilation all of the star bordered reports that appear in the General Aviation Service Difficulty Report (SDR) Summary, ZAC-327. The Significant Occurrence Report is used to highlight industry problem areas to field inspectors and the aviation public.

Limited analysis is performed by the Aviation Data Systems Branch, AFS-620 during the preparation of the "Significant Occurrence Report", which is generated each week and is included in the front of the Air Carrier SDR Summary. Significant Reports are hand selected by AFS-620's inspectors based on the individual merit of each report. The criteria for selection includes, but is not limited to, items that indicate high failure rates; items related to accidents or incidents; or design or maintenance failures which may affect the safe operation of the aircraft.

In some cases, this limited analysis of SDR data leads to the preparation of information bulletins which are routed to the appropriate product certification office for further investigation of the problem. The end result may be the issuance of an airworthiness directive (AD) by the Aircraft Certification Service (AIR) if warranted.

The Significant Occurrence Report (section I) of the weekly SDR Summary is not intended to be a summary of all significant events and should not be used as such. We recommend that you review further the applicable sections of the SDR summary that may be of interest.

GENERAL AVIATION SIGNIFICANT OCCURRENCE REPORT

4/12/98 - 4/18/98 ISSUE: 98-16 ZAC-327

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7120	7288M 55588	CESSNA 175				BRACKET 051313210	CRACKED ENG MT UPPER	3565	3/19/98 98ZZZX1461
*****	LOWER RIGHT FIREWALL ENGINE MOUNT BRACKET FOUND CRACKED INTO TWO PIECES. UPPER LEFT AND RIGHT BRACKETS FOUND TO HAVE SIMILAR CRACKS, BUT NOT AS EXTENSIVE. AREA IS DIFFICULT TO INSPECT AS ENGINE MOUNT BOLTS NEED TO BE REMOVED AND BRACKETS ARE OFTEN COVERED UP BY INSULATION. NEW PARTS ARE .010 INCH THICKER THAN ORIGINAL.								
7120	90045 56603	CESSNA 175A				BRACKET 051313211	CRACKED ENG MT UPPER		3/18/98 98ZZZX1464
*****	CRACK RADIATING FROM ENGINE MOUNT BOLT HOLE. THIS IS THE SECOND CESSNA 175 SUBMITTER FOUND WITH CRACKED BRACKETS. VISUAL INSPECTION IS SATISFACTORY TO IDENTIFY CRACKS, BUT GAINING ACCESS TO BRACKET MAY REQUIRE REMOVAL OF ENGINE MOUNT BOLT/NUT AND WASHERS.								
3221	9345C 31743	CESSNA 180				BOLT AN526A	CORRODED TAIL WHEEL		3/18/98 98ZZZX1463
*****	DURING AN ANNUAL INSPECTION, THE TWO TAIL WHEEL ATTACHMENT BOLTS WERE REMOVED FOR INSPECTION. BOTH BOLTS WERE FOUND CORRODED APPROXIMATELY 50 PERCENT OF THE BOLT DIAMETER. THIS CONDITION HAS ALSO BEEN NOTED ON SEVERAL OTHER TAIL WHEEL AIRCRAFT.								
7322	9109G 18260649	CESSNA 182N	CONT O470P		FACET MA45	PLUG 9944	MISSING CARBURETOR BOWL	1752	3/3/98 98ZZZX1476
*****	FOLLOWING TAKEOFF, ENGINE RUNNING ROUGH AND FIRE ERUPTED. AFTER LANDING, INSPECTION FOUND FIRE IN ENGINE COMPARTMENT DUE TO MISSING DRAIN PLUG FROM CARBURETOR BOWL. NO SAFETY WIRE EVIDENT.								
3230 BR0A	2616D 402C0115	CESSNA 402C				BOLT AN17520	FAILED LT MLG TORQ LINK		4/1/98 98ZZZX1486
*****	PILOT WAS LANDING ACFT WITH A CROSSWIND FROM THE RIGHT. PILOT TOUCHED DOWN ON RIGHT MAIN GEAR FIRST, AND THEN ON THE LEFT. AS ACFT DECELERATED WITH LITTLE OR NO APPLIED BRAKING ACTION, IT STARTED TO WOBBLE AND VEERED TO THE LEFT COMING TO A STOP OFF OF THE LEFT HAND SIDE OF THE RUNWAY. APPARENTLY, THE LEFT HAND TORQUE LINKS ON THE MAIN GEAR HAD SEPARATED CAUSING THE ACFT TO VEER TO THE LEFT. THE BOLT FOR THE TORQUE LINKS WAS STILL IN THE LOWER LINK, AND THE NUT WAS FOUND CLOSE TO THE TOUCHDOWN SPOT. THE THREADS OF THE NUT WERE STTRIPPED AND PIECES OF THE COTTER PIN WERE STILL IN THE HOLE ON THE BOLT.								
6710	313KA 940019	KAMAN K1200				LIMITER K982100001	BINDING COLLECTIVE CRANK	1385	1/14/98 98ZZZX1408
*****	PILOT REPORTED COLLECTIVE LIMITER BINDING HARD TO MOVE UP OR DOWN: 12 EACH LIMITERS WERE INSTALLED. AFTER EACH INSTALL, AIRCRAFT OPERATIONS REPORTED NORMAL. 12-10-97: COLLECTIVE LIMITER INPUT CRANK FOUND TO HAVE INTERMITTENT BINDING ON COLLECTIVE SHAFT AT DISASSEMBLY. CORROSION FOUND ON SHAFT (STEEL) OUTSIDE DIAMETER AND CRANK (ALUMINUM) 1.0. AT EACH LIMITER CHANGE, THE BINDING OF THE CRANK TO THE SHAFT WAS LOOSENED AND OPERATIONS WERE NORMAL FOR A RANGE OF OPERATING HOURS FROM 34.6 TO 261.4 HOURS. NO PART NUMBERS ARE LISTED FOR THE CRANK OR SHAFT. RECOMMEND A MIL SPEC CORROSION INHIBITOR AND LUBRICANT BE APPLIED TO THE COLLECTIVE CRANK AND SHAFT.								
7210		MTSBSI MU2B35	GARRTT TPE3316			BULL GEAR 8937394	FAILED GR BOX		2/21/97 1755 CA970226002
*****	(CAN) DURING CRUISE, THE RIGHT HAND ENGINE SUDDENLY FEATHERED. ENGINE SECURED. INSPECTION FOUND THAT THE BULL GEAR HAD FAILED EITHER IN THE GEAR TOOTH BASE AND/OR THE WEB DISK OR THE DISK RADIUS. COULD HAVE BEEN CAUSED BY FOREIGN OBJECT ENTERING THE GEAR MESH AREA. DAMAGE TO GEAR CAUSED LOSS OF ALL TEETH ON THE HIGH SPEED PINION AND LOSS OF DRIVE FROM THE POWER GROUP TO THE PROP, AS WELL AS DESTRUCTION OF THE SCAVENGE PUMP. DAMAGE CONFINED MAINLY TO THE DIAPHRAGM ASSEMBLY AND THE GEARBOX.								
7120	6367C 28R7837162	PIPER PA28R201				MOUNT 6711957	MAGNETIZED ENGINE		4/2/98 98ZZZX1483
*****	WHILE SWINGING THE COMPASS ADJUSTMENTS, WOULD NOT COMPENSATE ANY CLOSER THAN 18 DEGREES ON AN EAST HEADING. FOUND THE ENGINE MOUNT TO BE MAGNETIZED ON THE UPPER RIGHT AND CENTER FIREWALL ATTACH POINTS. SUBMITTER SUSPECTS THIS OCCURRED WHEN THE MOUNT WAS REPAIRED WITH AN ARC WELDER. THE PROBLEM WAS ELIMINATED BY REMOVING THE MOUNT AND PASSING IT THROUGH A DEGAUSSING COIL.								

***** DENOTES SIGNIFICANT OCCURRENCE

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2750		ZLIN			MORAVAN	FLAP CONTROL	DEFECTIVE	1130	4/22/97
		Z242L			Z14343110000	CSN02210724	DETENT PIN		CA970918003
*****	(CAN) AS A RESULT OF DOING A FLEET INSPECTION THE FLAP CONTROL LEVER DETENT PIN WAS FOUND MIGRATING OUT OF POSITION DUE TO FAILURE OF THE COTTER PIN. SUBMITTER RECOMMENDS INSPECTING THIS AREA.								

(End of GENERAL AVIATION SIGNIFICANT OCCURRENCE REPORT)

FEDERAL AVIATION ADMINISTRATION
SIGNIFICANT OCCURRENCE REPORT INDEX

Showing Specific Part Numbers and Aircraft Model by Year

FOR THE PERIOD OF: 4/12/98 To 4/18/98

<u>PART NUMBER</u>		<u>TOTAL</u>	<u>YEAR</u>											
<u>PART NAME</u>	<u>ACFT MODEL</u>		<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
03601018														
BEARING	BAE125800A	1	-	-	-	-	-	-	-	-	-	-	-	1
	SA227AT	1	-	-	-	-	-	-	-	-	-	1	-	-
	unknown	1	-	-	-	-	-	-	-	-	-	1	-	-
TOTAL of # 03601018 - - - - -		3	-	-	-	-	-	-	-	-	-	2	-	1
051313210														
BRACKET	175	1	-	-	-	-	-	-	-	-	-	-	-	1
	175A	1	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 051313210 - - - - -		2	-	-	-	-	-	-	-	-	-	-	-	2
051313211														
BRACKET	175	2	-	-	-	-	-	-	-	-	-	1	-	1
	175A	1	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 051313211 - - - - -		3	-	-	-	-	-	-	-	-	-	1	-	2
2121051R35														
ROTOR	unknown	1	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 2121051R35 - - - - -		1	-	-	-	-	-	-	-	-	-	-	-	1
213111059														
COMBUSTION LINER	unknown	1	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 213111059 - - - - -		1	-	-	-	-	-	-	-	-	-	-	-	1
6711957														
ENGINE MOUNT	PA28R200	1	-	-	-	-	1	-	-	-	-	-	-	-
MOUNT	PA28R200	2	-	-	-	-	-	-	-	1	1	-	-	-
	PA28R201	2	-	-	-	-	1	-	-	-	-	-	-	1
	PA28R201T	1	-	-	-	-	-	-	-	1	-	-	-	-

FAA SIGNIFICANT OCCURRENCE REPORT INDEX 4/12/98 To 4/18/98 (cont'd)

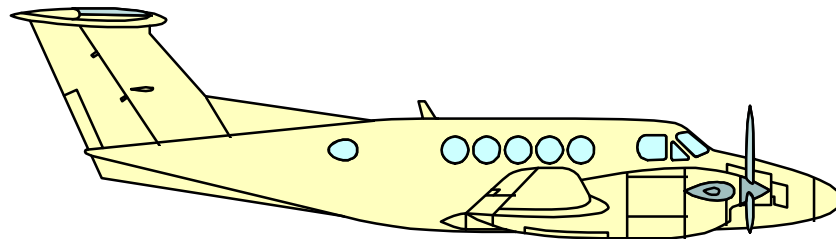
<u>PART NUMBER</u>		<u>YEAR</u>													
<u>PART NAME</u>	<u>ACFT MODEL</u>	<u>TOTAL</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	
TOTAL of # 6711957 -----		6	-	-	-	-	2	-	-	2	1	-	-	1	
6726656244															
RETAINING RING	206L3	1	-	-	-	-	-	1	-	-	-	-	-	-	
	unknown	1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL of # 6726656244 -----		2	-	-	-	-	-	1	-	-	-	-	-	1	
8937394															
BULL GEAR	MU2B35	1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL of # 8937394 -----		1	-	-	-	-	-	-	-	-	-	-	-	1	
9944															
PLUG	180F	1	-	-	-	-	1	-	-	-	-	-	-	-	
	182N	1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL of # 9944 -----		2	-	-	-	-	1	-	-	-	-	-	-	1	
AN17520															
BOLT	310Q	1	-	-	-	-	-	-	-	1	-	-	-	-	
	402C	2	-	-	-	-	-	1	-	-	-	-	-	1	
	402C	1	-	-	-	-	-	-	-	-	1	-	-	-	
	421B	1	-	-	-	-	-	-	1	-	-	-	-	-	
	421C	1	-	-	-	-	-	-	-	-	-	-	-	1	
LINK BOLT	421C	1	-	-	-	-	-	1	-	-	-	-	-	-	
TOTAL of # AN17520 -----		7	-	-	-	-	-	2	1	1	1	-	-	2	
AN526A															
BOLT	180	1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL of # AN526A -----		1	-	-	-	-	-	-	-	-	-	-	-	1	
B178008															
PULLEY	HAWKER1000	1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL of # B178008 -----		1	-	-	-	-	-	-	-	-	-	-	-	1	
CSN02210724															
FLAP CONTROL	Z242L	1	-	-	-	-	-	-	-	-	-	-	-	1	

FAA SIGNIFICANT OCCURRENCE REPORT INDEX 4/12/98 To 4/18/98 (cont'd)

<u>PART NUMBER</u>		<u>YEAR</u>													
<u>PART NAME</u>	<u>ACFT MODEL</u>	<u>TOTAL</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	
TOTAL of # CSN02210724 -----		1	-	-	-	-	-	-	-	-	-	-	-	1	
K982100001															
LIMITER	K1200	1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL of # K982100001 -----		1	-	-	-	-	-	-	-	-	-	-	-	1	
TOTAL for ALL (28) PART NUMBERS: ----		32	-	-	-	-	3	3	1	3	2	3	-	17	
END OF SIGNIFICANT OCCURRENCE REPORT INDEX															



DOMESTIC SERVICE DIFFICULTY REPORT



DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT**4/12/98 - 4/18/98 ISSUE: 98-16 ZAC-327**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2150	3255U TH1750	BEECH 58			585550137	BEARING 203SZZ	FAILED LT ENG AIR COND	308	3/18/98 98ZZZX1460
DURING RANDOM CHECK FOR AIRCRAFT CONDITION, FOUND AIR CONDITIONING TENSIONING PULLEY BEARING DISINTEGRATED. PULLEY WAS HELD IN PLACE BY BELT. ALL BEARING BALLS WERE GONE. ONLY INNER AND OUTER RACE REMAINED. THIS IS SECOND PULLEY TO FAIL ON THIS AIRCRAFT IN 307.8 HOURS. PREVIOUS BEARING TIME UNKNOWN. INSTALLED NEW ASSY.									
3244	131BA LD297	BEECH 65B80				TIRE	LEAK WEEP HOLES		4/6/98 98ZZZX1478
SUBMITTER STATED OPERATION HAS BEEN HAVING PROBLEMS WITH TIRES LEAKING FROM WEEP HOLES AFTER HAVING BEEN RETREADED BY REPAIR STATION NR BX3R4131. WE MARK THE TIRES AND RETURN THEM TO THE COMPANY. THEY RETREAD THEM AND SEND THEM BACK AND THEY STILL LEAK. THE WEEP HOLES ARE ON THE SIDES AND THE RETREADING DOES NOT GO DOWN THAT FAR.									
7120 MOGR	8311J 15066211	CESSNA 150G				BRACKET 04112815	DISPLACED ENG MT LT	3384	3/27/98 98ZZZX1484
FOUND LEFT LOWER ENGINE MOUNT BRACKET DISPLACED FROM NORMAL POSITION. THIS MAY HAVE OCCURRED DURING UNDOCUMENTED REPAIR IN AREA BY PERSONS UNKNOWN. NOTIFIED OWNER.									
3242	4725D 17272340	CESSNA 172N		PARKERHANFIN		BRAKE DISC	CRACKED MLG		4/1/98 98ZZZX1468
THREE CRACKS RADIATING OUT ACROSS THE DISC. CRACKS EXTENDED THROUGH THE DISC AND WERE FOUND BY VISUAL INSPECTION. THIS IS THE THIRD DISC FOUND CRACKED LIKE THIS IN THE LAST YEAR.									
7120 *****	7288M 55588	CESSNA 175				BRACKET 051313210	CRACKED ENG MT UPPER	3565	3/19/98 98ZZZX1461
LOWER RIGHT FIREWALL ENGINE MOUNT BRACKET FOUND CRACKED INTO TWO PIECES. UPPER LEFT AND RIGHT BRACKETS FOUND TO HAVE SIMILAR CRACKS, BUT NOT AS EXTENSIVE. AREA IS DIFFICULT TO INSPECT AS ENGINE MOUNT BOLTS NEED TO BE REMOVED AND BRACKETS ARE OFTEN COVERED UP BY INSULATION. NEW PARTS ARE .010 INCH THICKER THAN ORIGINAL.									
7120	7288M 55588	CESSNA 175				BRACKET 051313211	CRACKED ENG MT LOWER	3565	3/19/98 98ZZZX1462
LOWER RIGHT FIREWALL ENGINE MOUNT BRACKET FOUND CRACKED INTO TWO PIECES. UPPER LEFT AND RIGHT BRACKETS FOUND TO HAVE SIMILAR CRACKS, BUT NOT AS EXTENSIVE. AREA IS DIFFICULT TO INSPECT AS ENGINE MOUNT BOLTS NEED TO BE REMOVED AND BRACKETS ARE OFTEN COVERED UP BY INSULATION. NEW PARTS ARE .010 INCH THICKER THAN ORIGINAL.									
7120	90045 56603	CESSNA 175A				BRACKET 051313210	CRACKED ENG MT LT LOWER		3/18/98 98ZZZX1466
CRACK RADIATING FROM ENGINE MOUNT BOLT HOLE. THIS IS THE SECOND CESSNA 175 SUBMITTER FOUND WITH CRACKED BRACKETS. VISUAL INSPECTION IS SATISFACTORY TO IDENTIFY CRACKS, BUT GAINING ACCESS TO BRACKET MAY REQUIRE REMOVAL OF ENGINE MOUNT BOLT/NUT AND WAHSERS.									
7120 *****	90045 56603	CESSNA 175A				BRACKET 051313211	CRACKED ENG MT UPPER		3/18/98 98ZZZX1464
CRACK RADIATING FROM ENGINE MOUNT BOLT HOLE. THIS IS THE SECOND CESSNA 175 SUBMITTER FOUND WITH CRACKED BRACKETS. VISUAL INSPECTION IS SATISFACTORY TO IDENTIFY CRACKS, BUT GAINING ACCESS TO BRACKET MAY REQUIRE REMOVAL OF ENGINE MOUNT BOLT/NUT AND WASHERS.									
7120	90045 56603	CESSNA 175A				BRACKET 051313209	CRACKED ENG MT RT LOWER		3/18/98 98ZZZX1465
CRACK RADIATING FROM ENGINE MOUNT BOLT HOLE. THIS IS THE SECOND CESSNA 175 SUBMITTER FOUND WITH CRACKED BRACKETS. VISUAL INSPECTION IS SATISFACTORY TO IDENTIFY CRACKS, BUT GAINING ACCESS TO BRACKET MAY REQUIRE REMOVAL OF ENGINE MOUNT BOLT/NUT AND WAHSERS.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT (cont'd)

4/12/98 To 4/18/98 ISSUE: 98-16 ZAC-327

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3221	9345C	CESSNA				BOLT	CORRODED		3/18/98
	31743	180				AN526A	TAIL WHEEL		98ZZZX1463
*****	DURING AN ANNUAL INSPECTION, THE TWO TAIL WHEEL ATTACHMENT BOLTS WERE REMOVED FOR INSPECTION. BOTH BOLTS WERE FOUND CORRODED APPROXIMATELY 50 PERCENT OF THE BOLT DIAMETER. THIS CONDITION HAS ALSO BEEN NOTED ON SEVERAL OTHER TAIL WHEEL AIRCRAFT.								
2701	3374U	CESSNA				YOKE	FAILED		4/1/98
	18254774	182F					COCKPIT		98ZZZX1467
	CONTROL YOKE FAILURE ON LANDING. CONTROL YOKE BROKE, FAILED IN UPPER LEFT SIDE. AIRCRAFT MANUFACTURED IN 1963. SUSPECT CAUSE EXTREME AGE OF PLASTIC PART. AIRCRAFT AND CONTROL YOKE TT 2,800 HOURS.								
2820	757ME	CESSNA			STRATOFLEX	HOSE	FAILED	354	4/3/98
	R18201247	R182				1580016D0112	FUEL		98ZZZX1449
	FUEL HOSE FAILED AFTER 2 YEARS AND 254 HOURS OF OPERATION. THE TAG ON THE HOSE HAS A DATE OF MANUFACTURE, 6-4-96.								
5730	67JK	CESSNA				SKIN	CRACKED		4/3/98
KQ3R	P21000684	P210N				12212222	RT WING TOP INBD		98ZZZX1470
	CRACKS AT RIVET HOLES ON TOP OF BOTH WINGS FROM .25 INCH TO .75 INCH AT TRAILING EDGE BETWEEN WS 110.00 AND WS 124.00 AND ON WS 110.00. PRECISE FLIGHT, INC., SPEED BRAKES INSTALLED UNDER STC 2602NM ON 8-10-90 BETWEEN WS 124.00 AND WS 138.00. TOTAL TIME SINCE INSTALLATION, 449.5 HOURS. ESTIMATE 20.0 HOURS USING SPEED BRAKES. VIBRATION OF THE SPEED BRAKES WHEN EXTENDED COULD BE THE CAUSE. SUBMITTER SUGGESTED INSPECTING THIS AREA AT EVERY PRE-FLIGHT, 50, 100, AND ANNUAL INSPECTION, OR DISCONTINUE USING SPEED BRAKES UNTIL THIS PROBLEM IS RESOLVED.								
5730	67JK	CESSNA				SKIN	CRACKED		4/3/98
KQ3R	P21000684	P210N				12212212	LT WING TOP INBD		98ZZZX1469
	CRACKS AT RIVET HOLES ON TOP OF BOTH WINGS FROM .25 INCH TO .75 INCH AT TRAILING EDGE BETWEEN WS 110.00 AND WS 124.00 AND ON WS 110.00. PRECISE FLIGHT, INC., SPEED BRAKES INSTALLED UNDER STC 2602NM ON 8-10-90 BETWEEN WS 124.00 AND WS 138.00. TOTAL TIME SINCE INSTALLATION, 449.5 HOURS. ESTIMATE 20.0 HOURS USING SPEED BRAKES. VIBRATION OF THE SPEED BRAKES WHEN EXTENDED COULD BE THE CAUSE. SUBMITTER SUGGESTED INSPECTING THIS AREA AT EVERY PRE-FLIGHT, 50, 100, AND ANNUAL INSPECTION, OR DISCONTINUE USING SPEED BRAKES UNTIL THIS PROBLEM IS RESOLVED.								
3230	2616D	CESSNA				BOLT	FAILED		4/1/98
BR0A	402C0115	402C				AN17520	LT MLG TORQ LINK		98ZZZX1486
*****	PILOT WAS LANDING ACFT WITH A CROSSWIND FROM THE RIGHT. PILOT TOUCHED DOWN ON RIGHT MAIN GEAR FIRST, AND THEN ON THE LEFT. AS ACFT DECELERATED WITH LITTLE OR NO APPLIED BRAKING ACTION, IT STARTED TO WOBBLE AND VEERED TO THE LEFT COMING TO A STOP OFF OF THE LEFT HAND SIDE OF THE RUNWAY. APPARENTLY, THE LEFT HAND TORQUE LINKS ON THE MAIN GEAR HAD SEPARATED CAUSING THE ACFT TO VEER TO THE LEFT. THE BOLT FOR THE TORQUE LINKS WAS STILL IN THE LOWER LINK, AND THE NUT WAS FOUND CLOSE TO THE TOUCHDOWN SPOT. THE THREADS OF THE NUT WERE STTRIPPED AND PIECES OF THE COTTER PIN WERE STILL IN THE HOLE ON THE BOLT.								
5551	8BL	CESSNA				ATTACH BOLT	MISSING		3/1/98
	4140098	414				NAS13064	RT FWD H STAB		98ZZZX1472
	DURING AN ANNUAL INSPECTION, HORIZ STAB MOVED UP AND DOWN FROM THE RT SIDE. AN EXCESSIVE AMOUNT OF MOVEMENT WAS NOTED. DUIRNG CLOSER INSPECTION, FOUND BOLT, P/N NAS1306-4, MISSING FROM THE RT FORWARD ATTACH POINT. INSIDE THE STABILIZER AFT OF THE FORWARD SPAR, BOLT WAS FOUND. FORWARD OF THE AFT SPAR IN THE AFT TAILCONE, FOUND 2 HALVES OF NUT, P/N MS21044N6.								
7603	911ER	CESSNA				CABLE	BROKEN	7806	3/25/98
	4410249	441				99103213	LT ENG PWR CONT		98ZZZX1485
	LEFT ENGINE POWER CONTROL CABLE BROKE ABOUT 3.25 INCHES INSIDE HOUSING AT COCKPIT CONSOLE.								
2810	32TP	CHILD				FUEL SYSTEM	CONTAMINATED		2/17/98
	2179	S2APITTS				26502013	FUEL FLOP TUBE		98ZZZX1482
	WHILE MANUEVERING IN A FLAT SPIN, THE PILOT EXPERIENCED AN ENGINE OUT. AN ATTEMPT TO RESTART FAILED BECAUSE THE BENDIX FAILED TO ENGAGE. DURING THE ACCIDENT INVESTIGATION, IT WAS NOTED THE FUEL FILTER HAD NUMEROUS METAL PARTICLES. SUBMITTER STATED BY PLACING A TEFLON RING AROUND THE FLOP TUBE, WOULD KEEP THE FLOP TUBE FROM SCRAPING THE METAL AND WOULD ELIMINATE METAL PARTICLES FROM ENTERING THE FUEL FILTER.								

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT (cont'd)

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8011	32TP	CHILD			PRESTOLITE	BENDIX DRIVE	FAILED		2/17/98
	2179	S2APITTS			MZ4218	480388	STARTER		98ZZZX1481
WHILE MANEUVERING IN A FLAT SPIN, THE PILOT EXPERIENCED AN ENGINE OUT. AN ATTEMPT TO RESTART COULD NOT BE MADE BECAUSE THE BENDIX FAILED TO RE-ENGAGE.									
6120	558ND	DIAMON				CABLE	FAILED	492	3/23/98
OG5R	10129	DA20A1				2076000112	PROP CONTROL		98ZZZX1459
PILOT REPORTED PROPELLER CONTROL CABLE LOST TENSION DURING RUN-UP. FOUND CABLE CORE WIRE BROKEN WHERE CABLE CONNECTS TO GOVERNOR. ROUTING OF CABLE HAD PLACED A BENDING PRELOAD ON CABLE. SUBMITTER SUGGESTED STRAIGHTER ROUTING AND A ROD END TYPE CABLE INSTEAD OF SINGLE CORE WIRE TYPE.									
7714	520SS	DIAMON				CABLE	FAILED	584	3/23/98
OG5R	10075	DA20A1				207100051C	TACHOMETER		98ZZZX1458
DURING RUN-UP PRIOR TO TAKEOFF, TACH WENT TO ZERO. FOUND THAT CABLE END SWAGE/NUT ON TACH INDICATOR END HAD PULLED OFF THE CABLE HOUSING. NEITHER CABLE END WAS SWAGED TIGHT TO CABLE OUTER SHEATH. NEW CABLE INSTALLED. NEW CABLE APPEARED TO BE SWAGED THE SAME AMOUNT. SUGGEST A TIGHTER SWAGE IF CABLE SHEATH WILL ALLOW IT.									
2731	790RA	EMB				BRACKET	CRACKED	11464	1/31/98
BQTA	11027B	EMB110P1				110321004	TRIM ACTUATOR		98ZZZM444
ELEVATOR TRIM TAB ACTUATOR SUPPORT, PART NR 110-3210-04, FOUND CRACKED DURING INSPECTION PER AD 91-25-09. BRACKET WAS REPLACED. (M)									
5510	101TN	EMB				BRACKET	CRACKED	15771	1/12/98
BQTA	110271	EMB110P1				11014110731	HORIZ STAB		98ZZZM443
AT FRAME STATION 33, LEFT FORWARD UPPR SUPPORT BRACKET, P/N 110-1411-07-31, FOUND CRACKED DURING DYE PENETRANT INSPECTION PER AD 83-14-09. CRACK EXTENDED APPROXIMATELY .125 INCH THROUGH .1875 INCH FROM BOLT HOLE. BRACKET WAS REPLACED.									
5712	75139	PIPER				RIB	CRACKED	6588	3/17/98
	28R7635269	PA28R200				7847505	RT WS 49.25		98ZZZX1451
RIGHT WING STA 49.25 RIB CRACKED. CRACK NOT VISIBLE UNTIL BRACE STUD ATTACH REMOVED.									
5712	75139	PIPER				RIB	CRACKED	6588	3/17/98
	28R7635269	PA28R200				7847504	WS 49.25 LT WING		98ZZZX1450
WING STA 49.25 RIB CRACKED. CRACK NOT VISIBLE UNTIL BRACE STUD ATTACH WAS REMOVED.									
7120	6367C	PIPER				MOUNT	MAGNETIZED		4/2/98
	28R7837162	PA28R201				6711957	ENGINE		98ZZZX1483
*****	WHILE SWINGING THE COMPASS ADJUSTMENTS, WOULD NOT COMPENSATE ANY CLOSER THAN 18 DEGREES ON AN EAST HEADING. FOUND THE ENGINE MOUNT TO BE MAGNETIZED ON THE UPPER RIGHT AND CENTER FIREWALL ATTACH POINTS. SUBMITTER SUSPECTS THIS OCCURRED WHEN THE MOUNT WAS REPAIRED WITH AN ARC WELDER. THE PROBLEM WAS ELIMINATED BY REMOVING THE MOUNT AND PASSING IT THROUGH A DEGAUSSING COIL.								
5280	45004	PIPER				HINGE	FAILED		3/1/98
JKA	318052163	PA31350			4752930	4752932	LT INB GR DOOR		98ZZZX1453
LEFT MAIN GEAR INBOARD DOOR FORWARD HINGE WAS FOUND BROKEN. SUBMITTER STATED THIS IS THE 8TH FOUND IN RECENT HISTORY. THIS HINGE IS THE 'NEW STYLE' SPECIFIED IN AD 80-26-05. THIS HINGE NEEDS TO BE RE-DESIGNED TO PREVENT THIS TYPE OF CRACKING, AND POSSIBLE GEAR FOULING.									
3260	3020M	PIPER				ACTUATOR ARM	FAILED	4064	3/1/98
	447995220	PA44180			8640902	451823	NLG DOWNLOCK		98ZZZX1447
NO DOWN AND LOCK INDICATION ON NOSE GEAR. FOUND DOWN AND LOCK SWITCH ACTUATOR ARM BROKEN, NOT MAKING SWITCH CONTACT. SUSPECT CAUSE METAL FATIGUE. SUBMITTER SUGGESTED REPLACING ACTUATOR AT REASONABLE TIME INTERVALS.									

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS**4/12/98 - 4/18/98 ISSUE: 98-16 ZAC-327**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2430 HEEA	3116L 51529	BELL 206L3				RELAY SM20ACD200A21	FAILED DC SYS	6	3/30/98 HEEA0013666
COIL AND CONTACTOR ARE BURNT. COIL IS BURNT.									
2436 HEEA	11027 45411	BELL 206L1				VOLT REGULATOR 206075447007	FAILED DC SYS		3/26/98 HEEA0013581
CAUSES STARTER TO RUN AFTER SHUTDOWN.									
2810 HEEA		BELL 206L1				CELL 206064611001	LEAK FUEL SYS		4/2/98 HEEA0013688
FUEL CELL POROUS FABRIC. NEEDS INSIDE COATING DUE TO POSSIBLE PIN HOLE LEAK.									
2810 HEEA	10761 45381	BELL 206L1				CELL 206064611001	LEAKING FUEL SYS		4/2/98 HEEA0013687
FUEL CELL BLISTERS AND LEAKAGE AS MARKED AND POSSIBLE FUEL SEEPAGE THROUGH FABRIC.									
2820 HEEA	2761N 45277	BELL 206L1				CARTRIDGE 2C271	FAILED FUEL SYS		4/2/98 HEEA0013738
CARTRIDGE INTERMITTENT OPERATION.									
2822 HEEA	5017G 45228	BELL 206L1				BOOST PUMP 164A199	FAILED FUEL SYS		4/2/98 HEEA0013769
RH BOOST PUMP QUILTS AFTER 10 MINUTES OF OPERATION.									
2822 HEEA	10778 45391	BELL 206L1				BOOST PUMP 164A199	FAILED FUEL SYS		4/2/98 HEEA0013770
FUEL BOOST PUMP RPM MOTOR WILL NOT RUN.									
3340 HEEA	108PH 51334	BELL 206L3				POWER SUPPLY A490ATSDF1428	FAILED STROBE		4/2/98 HEEA0013786
STROBE POWER SUPPLY INOPERATIVE.									
3340 HEEA	363BH 51345	BELL 206L3				POWER SUPPLY A490A	FAILED STROBE		4/2/98 HEEA0013771
STROBE LIGHT INOPERATIVE.									
3340 HEEA	363BH 51345	BELL 206L3				POWER SUPPLY A490A	FAILED STROBE		4/2/98 HEEA0013809
POWER SUPPLY INOPERATIVE AND HAS NO OUTPUT.									
3340 HEEA	3116P 51530	BELL 206L3				POWER SUPPLY A490ATSDF1428	FAILED STROBE		4/2/98 HEEA0013788
STROBE POWER SUPPLY INOPERATIVE.									
3340 HEEA	3207Q 51540	BELL 206L3				POWER SUPPLY A490A	FAILED STROBE		4/2/98 HEEA0013808
POWER SUPPLY INOPERATIVE AND HAS NO OUTPUT.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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3340 HEEA	3207Q 51540	BELL 206L3				POWER SUPPLY A490A	FAILED STROBE		4/2/98 HEEA0013739
	POWER SUPPLY HAS NO OUTPUT.								
3416 HEEA	406EH 45183	BELL 206L1				ALTIMETER 59341	LEAKS COCKPIT		4/2/98 HEEA0013685
	ALTIMETER LEAKED DURING 12 MONTH INSPECTION.								
3416 HEEA	3892R 45594	BELL 206L1				ALTIMETER 59341	LEAKING COCKPIT		4/2/98 HEEA0013773
	ALTIMETER LEAKING AT KNOB.								
3421 HEEA	8591X 51495	BELL 206L3				GYRO 206075607103	FAILED COCKPIT		4/2/98 HEEA0013709
	ATTITUDE GYRO SPINS AND WILL NOT CAGE.								
3422 HEEA	2777D 45299	BELL 206L1				GYRO RCA15BK1	FAILED COCKPIT		4/2/98 HEEA0013761
	DIR GYRO CAGING SHAFT STICKS. PRECESSES AND GLASS FOGS.								
3424 HEEA	108PH 51334	BELL 206L3				INDICATOR 206070274005	FAILED COCKPIT		4/2/98 HEEA0013764
	INDICATOR STAYS 1/2 BALL OFF.								
3453 HEEA	41791 51465	BELL 206L3			KA83	ANTENNA 071143100	FAILED LORAN		4/2/98 HEEA0013835
	LORAN UNIT NOT RECEIVING SIGNAL.								
3457 LS1R	9907K 2040	BELL 206B3			GARMIN INTL GPS150	GPS 0110005400	FAILED COCKPIT		3/30/98 98ZZZX1492
	GPS WAS RETURNED FROM OVERHAUL. BATTERY LOW LIGHT STAYED ON. UNIT WOULD NOT PICK UP SATELLITES.								
5260 HEEA		BELL 206L3				STEP 206331102	CORRODED RT STEP		4/2/98 HEEA0013832
	STEP HAS EXCESSIVE CORROSION AT MOUNT POINTS.								
5522 HEEA	1078D 45397	BELL 206L1				ELEVATOR 206023119157	CORRODED LT ELEV		4/2/98 HEEA0013758
	LT ELEV ASSY CORRODED THROUGH SKIN.								
5522 HEEA	1078D 45397	BELL 206L1				SKIN 206023119159S	CORRODED ELEV		4/2/98 HEEA0013759
	ELEV CORRODED THROUGH SKIN.								
6210 LS1R	54AG 7120721	BELL OH58A				WASHER 206010154003	BROKEN BLADE RETAIN		3/31/98 98ZZZX1493
	DURING PRE-FLIGHT INSPECTION, PILOT FOUND THE WASHER UNDER THE NUT OF THE BLADE RETENTION BOLT WAS CRACKED. UPON REMOVAL OF NUT, IT WAS FOUND COMPLETELY BROKEN. WASHER WAS REPLACED AND AIRCRAFT RELEASED FOR FLIGHT.								

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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6240 HEEA	1078G 45398	BELL 206L1				INDICATOR 206070265101	FAILED COCKPIT		4/2/98 HEEA0013762
INDICATOR ROTOR NEEDLE INOPERATIVE.									
6240 HEEA	205FC 51130	BELL 206L3				TACH GENERATOR 206076373001	FAILED ROTOR		4/2/98 HEEA0013779
TACH GENERATOR FAILED. NO ROTOR INDICATION.									
6240 HEEA	108PH 51334	BELL 206L3				INDICATOR 206075681105	FLUCTUATES DUAL TACH		4/2/98 HEEA0013805
DUAL TACH N2 NEEDLE FLUCTUATES.									
6320 HEEA	5000K 45167	BELL 206L1				PUMP 206040190005	FAILED M/R GR BOX		4/2/98 HEEA0013797
SHAFT BUSHING WORN.									
6320 HEEA	1078D 45397	BELL 206L1				PUMP 206040190005	WORN GEAR BOX OIL		4/2/98 HEEA0013798
SHAFT BUSHING WORN.									
6320 HEEA	4282Z 51499	BELL 206L3				PUMP 206040190005	LEAKING GEAR BOX		4/2/98 HEEA0013813
SEAL LEAKING-SHAFT WORN.									
6710 HEEA	2275Y 3626	BELL 206B3				ACTUATOR 206062721113	FAILED DROOP COMP		4/2/98 HEEA0013716
ACTUATOR DOES NOT MOVE WHEN POWER IS APPLIED.									
6710 HEEA	5014V 45217	BELL 206L1				ACTUATOR 206062721109	FAILED M/R		4/2/98 HEEA0013791
ACTUATOR INOPERATIVE.									
6710 HEEA	2758N 45267	BELL 206L1				ACTUATOR 206062721109	FAILED M/R		4/2/98 HEEA0013778
ACTUATOR INOPERATIVE.									
6710 HEEA		BELL 206L3				SLIDE AND SLEEVE C4264215	LEAKING M/R CONTROL		4/2/98 HEEA0013697
LEAKING INTERNALLY FROM INNER SPOOLS.									
6710 HEEA	8592X 51508	BELL 206L3				ACTUATOR 206062721109	FAILED M/R		4/2/98 HEEA0013717
ACTUATOR INOPERATIVE.									
6710 HEEA	21497 51518	BELL 206L3				ACTUATOR 206062721109	FAILED M/R		4/2/98 HEEA0013812
ACTUATOR INOPERATIVE.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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6710 HEEA	7077F 52038	BELL 206L4				ACTUATOR 206062721109	FAILED M/R		4/2/98 HEEA0013715
	INOPERATIVE.								
6730 HEEA	6610C 51425	BELL 206L3				CYLINDER 206076062003	LEAKING M/R SERVO	16623	4/2/98 HEEA0013695
	M/R SERVO LEAKING.								
6730 HEEA	6610C 51425	BELL 206L3				CYLINDER 206076062003	LEAKING M/R SERVO	14929	4/2/98 HEEA0013693
	M/R SERVO LEAKING.								
6730 HEEA	6610C 51425	BELL 206L3				CYLINDER 206076062003	LEAKING M/R SERVO	18137	4/2/98 HEEA0013694
	M/R SERVO LEAKING.								
7314 HEEA	8591X 51495	BELL 206L3				FUEL PUMP 3881005	WORN FUEL SYS		4/2/98 HEEA0013833
	WORN DRIVE SHAFT SPLINES AND GEAR SPLINES.								
7332 HEEA	2250U 45754	BELL 206L1				INDICATOR 206075676003	FAILED DUAL FUEL		4/2/98 HEEA0013765
	FUEL PRESSURE INDICATOR READS LOW.								
7714 HEEA	2272J 3620	BELL 206B3				INDICATOR 206070266009	FAILED COCKPIT		4/2/98 HEEA0013755
	INDICATOR INTERMITTENTLY STICKS AT ZERO.								
7714 HEEA	50046 45173	BELL 206L1				TACH GEN 206076373001	WORN SPLINE AREA		4/2/98 HEEA0013729
	WORN SPLINE AND CRACKS IN MOUNT PLATE AT BOLT HOLES.								
7714 HEEA	5005F 45176	BELL 206L1				GAS PROD GAGE 206075682001	ERRATIC COCKPIT		4/3/98 HEEA0013845
	GAS PROD GAGE ERRATIC ON STARTUP.								
7714 HEEA	5007Y 45192	BELL 206L1				TACH GEN 206076373001	WORN SPLINE AREA		4/2/98 HEEA0013730
	TACH GEN WORN SPLINE.								
7714 HEEA	1077A 45382	BELL 206L1				TACH GEN 206076373001	WORN SPLINE AREA		4/2/98 HEEA0013728
	TACH GEN HAS WORN SPLINE AND CRACKS IN MOUNT PLATE AT BOLT HOLES.								
7714 HEEA	1078G 45398	BELL 206L1				INDICATOR 206070265011	FAILED DUAL TACH		4/2/98 HEEA0013767
	TURBINE NEEDLE HAS STICKY OPERATION.								

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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7714 HEEA	108PH 51334	BELL 206L3				TACH GEN 206062627003	FAILED COCKPIT		4/2/98 HEEA0013754
TACH GENERATOR FLUCTUATES 4% TO 10%.									
7714 HEEA	6251Y 51556	BELL 206L3				INDICATOR 206075682107	FAILED ENGINE		4/2/98 HEEA0013768
GAS PRODUCER INDICATOR NEEDLE STICKS AND DOES NOT INDICATE 10%.									
7722 HEEA	5007N 45184	BELL 206L1				INDICATOR 206375007103	STICKS TOT		4/3/98 HEEA0013843
TOT NEEDLE STICKS AT 500 WHEN HEATED.									
7921 HEEA	5014V 45217	BELL 206L1				OIL COOLER 8543909	LEAKING ENGINE		4/2/98 HEEA0013818
OIL COOLER LEAKING.									
7931 HEEA	54641 51184	BELL 206L3				INDICATOR 206075677103	FAILED ENG OIL		4/2/98 HEEA0013766
PSI HIGH ON UPPER SCALE.									
3120 HEEA	102PH 30899	BELL 212				DIGITAL CLOCK 811B	DEFECTIVE COCKPIT		4/3/98 HEEA0013841
COATING ON FACE IS MISSING AND BATTERY IS DEAD.									
3340 HEEA	1079U 31122	BELL 212				BEACON DK100	WEAK STROBE	947	4/2/98 HEEA0013700
BEACON IS WEAK.									
5320 HEEA	27805 31106	BELL 212				BOLT ASSY 212030155001	FAILED LIFT LINK	1692	3/26/98 HEEA0013527
ON POSTFLIGHT INSPECTION FOUND HEAD END OF LOWER LIFT LINK BOLT LYING IN THE BOTTOM OF THE SERVO COMPARTMENT. BOLT FAILED 1 AND 5/8" FROM THE END. THE THREADED END OF THE BOLT REMAINED ENGAGED IN THE LIFT LINK. REPLACED WITH SERVICEABLE BOLT.									
6220 HEEA	3131S 30953	BELL 212				CAP ASSY 212030437007	CRACKED M/R		4/2/98 HEEA0013790
RUBBER CUSHION WORN AND CRACKED.									
7712 HEEA	102PH 30899	BELL 212				INDICATOR 212070160007	FAILED TORQUEMETER		4/3/98 HEEA0013847
NR 2 NEEDLE WILL NOT INDICATE.									
7712 HEEA	1079U 31122	BELL 212				INDICATOR 212070160007	STUCK TORQUEMETER		4/2/98 HEEA0013681
INDICATOR NEEDLE STUCK AT ZERO.									
7722 HEEA	5736J 31140	BELL 212				INDICATOR 212075067105	FAILED COCKPIT		4/2/98 HEEA0013690
ITT INDICATOR DOES NOT WORK.									

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2210 HEEA	59806 28140	BELL 214ST				AMPLIFIER 214074301105	MALFUNCTION SCAS		4/2/98 HEEA0013810
PITCH CHANNEL KICKS OFF WITH CONTROL INPUT.									
2210 HEEA	59805 28141	BELL 214ST				AMPLIFIER 214074305105	FAILED AUTO FLIGHT		4/2/98 HEEA0013780
AMPLIFIER FAILED MONITOR TEST.									
2210 HEEA	59805 28141	BELL 214ST				AMPLIFIER 214074305105	FAILED AUTOFLIGHT		4/2/98 HEEA0013783
AMPLIFIER FAILED MONITOR TEST.									
2400 HEEA	8045T 28101	BELL 214ST				RELAY 214175132103	FAILED DC SYS		3/26/98 HEEA0013546
CONTACT BALL NR2 TO 24V OPEN IN REST POSITION.									
2400 HEEA	8045T 28101	BELL 214ST				CIRCUIT BREAKER M833830207	FAILED DC SYS		4/2/98 HEEA0013718
CIRCUIT BREAKER INOPERATIVE.									
2400 HEEA	8045T 28101	BELL 214ST				CIRCUIT BREAKER M833830207	FAILED DC SYS		4/2/98 HEEA0013784
CHARGES MOTION OUTPUT NOT CHARGING BATTERY.									
2400 HEEA	59806 28140	BELL 214ST				RELAY 214175171103	FAILED DC SYS		4/2/98 HEEA0013698
DRAW DOWN DURING BATTERY START.									
2430 HEEA	59806 28140	BELL 214ST				RELAY 214175133103	FAILED DC SYS		4/2/98 HEEA0013814
INOPERATIVE.									
2435 HEEA	6957Y 28139	BELL 214ST				GENERATOR 214175150105	FAILED DC SYS	2232	4/2/98 HEEA0013811
GENERATOR TRIPS BREAKER.									
2842 HEEA	59805 28141	BELL 214ST				PROBE 214066212105	FAILED FUEL SYS		4/2/98 HEEA0013794
PROBE WILL NOT TEST.									
2931 HEEA		BELL 214ST				INDICATOR 214175252101	ERRATIC HYD SYS		4/2/98 HEEA0013781
HYD PRESS INDICATOR ERRATIC READINGS.									
3040 HEEA	8045T 28101	BELL 214ST				CONTROL UNIT 214075186001	FAILED WINDSHIELD		4/2/98 HEEA0013795
WINDSHIELD HEAT INOPERATIVE; DOES NOT COME ON.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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3420 HEEA	59805 28141	BELL 214ST				AFCS 214074300107	INTERMITTENT ANNUN PANEL		4/2/98 HEEA0013782
AFCS ENGAGE INTERMITTENT.									
3454 HEEA	59805 28141	BELL 214ST			KDA692	NAV UNIT 071121701	FAILED COCKPIT		4/2/98 HEEA0013753
NAV UNIT DOES NOT DRIVE POINTER.									
6310 HEEA	6957Y 28139	BELL 214ST			214040019101	SEAL 214040840101	LEAKING XMSN		4/3/98 HEEA0013848
SEAL LEAKING.									
6330 HEEA	6957Y 28139	BELL 214ST				PLATE ASSY 214031614128	CRACKED M/R XMSN		4/2/98 HEEA0013714
PLATE ASSY CRACKED RUBBER CAUSING M/R VIBRATION.									
6330 HEEA	6957Y 28139	BELL 214ST				PLATE ASSY 214031614127	CRACKED M/R XMSN		4/2/98 HEEA0013713
PLATE ASSY HAS CRACKED RUBBER CAUSING M/R VIBRATION.									
6710 HEEA	8045T 28101	BELL 214ST				ACTUATOR ASSY 214001970111	FAILED M/R		4/2/98 HEEA0013699
ACTUATOR INOPERATIVE.									
7714 HEEA	59805 28141	BELL 214ST				INDICATOR 214175251103	FAILED TRIPLE TACH		4/2/98 HEEA0013777
TRIPLE TACH INDICATOR INTERMITTENT.									
7933 HEEA	3897N 28106	BELL 214ST				INDICATOR 214175253103	FAILED OIL TEMP		3/19/98 HEEA0013476
INDICATOR READS LOW ON TEMP SIDE.									
6220 RMXA	4UV 23019	BELL 230				LIFT LINK 222031613101	WORN M/R		1/27/98 98ZZZX1504
LIFT LINK BEARING WORN OUT OF LIMITS. REMOVED AND REPLACED.									
2435 HEEA	403PH 53177	BELL 407				STARTER 23081018	FAILED START/GEN	555	4/2/98 HEEA0013757
STARTER TURNS SLOWLY AND CHATTERS. OVERHAULED BY ACCESSORY OVERHAUL SHOP DUE TO ALL FOUR BOTTOM BRUSH LEADS SEPARATING FROM BRUSHES, BRUSHES BURNT AND COMMUTATOR WAS SEVERELY PITTED.									
6310 HEEA	427PH 53059	BELL 407			406040500123	CARBON SEAL 406340102101	LEAKING FREEWHEEL		4/1/98 HEEA0013676
CARBON SEAL LEAKING.									
6420 HEEA	427PH 53059	BELL 407			407012101105	BEARING 407312100101	LOOSE YOKE	196	4/1/98 HEEA0013677
ON POST FLIGHT FOUND CLICKING NOISE EMANATING FROM TRUNNION CLAMP RING AREA. SUSPECT TRUNNION BEARING LOOSE IN YOKE, CAUSING NOISE WHEN BLADES ARE FLAPPED. MORE NOTICEABLE AFTER FLIGHT WHEN WARM, NOISE DIMINISHES AS YOKE COOLS. REPAIRED AND INSPECTED BY OVERHAUL SHOP.									

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6500 HEEA	407MM 53060	BELL 407			406040320101	BEARING 406040339111	ROUGH T/R		4/1/98 HEEA0013675
ROUGH BEARINGS. SERIAL NUMBERS REMOVED ARE C97-1825 AND C97-1883.									
2210 HEEA		BELL 412				COMPUTER 4025008918	FAILED AFCS		4/2/98 HEEA0013800
COMPUTER AFCS WILL NOT TEST PROPERLY.									
2210 HEEA	5759N 33002	BELL 412				TARSYN 2593996333	FAILED AUTO FLIGHT		4/2/98 HEEA0013825
HEADING PRECESSES AND FAILS TEST 8.5 ON SST.									
2210 HEEA	7128R 36007	BELL 412				TARSYN 2593996333	FAILED AUTO FLIGHT		4/2/98 HEEA0013774
TARSYN WILL NOT SLAVE TO CONVERT HEADINGS.									
2422 HEEA	293CA	BELL 412				INVERTER 412075101101	MALFUNCTION AC SYS		4/2/98 HEEA0013806
450VA INVERTER CAUSES FUEL GAUGE TO FLUCTUATE.									
2422 HEEA	5759N 33002	BELL 412				INVERTER 412075101101	MALFUNCTION AC SYS		4/2/98 HEEA0013763
450VA ALTERNATER CAUSES CYCLIC TO BECOME ERRATIC.									
2422 HEEA	142PH 33150	BELL 412				INVERTER 412075101101	NOISY AC SYS		4/2/98 HEEA0013726
450VA INVERTER VERY NOISY.									
2432 HEEA	2298Z 33077	BELL 412				BATTERY 39563001	FAILED STANDBY DC		4/2/98 HEEA0013720
BATTERY UNIT FAILED CAPACITY TEST.									
2436 HEEA	23023 33080	BELL 412				CONTROL UNIT 51509002R	FAILED DC SYS		4/2/98 HEEA0013725
GENERATOR WOULD NOT COME ON LINE.									
2621 HEEA	3911L 33023	BELL 412				EXTINGUISHER A352T	DEFECTIVE FIRE EXT		4/3/98 HEEA0013840
FIRE EXT OUT OF GREEN AT 10C.									
2822 HEEA	2258F 33073	BELL 412				PUMP 164A1681	FAILED FUEL BOOST		4/2/98 HEEA0013707
BOOST PUMP INOPERATIVE.									
2824 HEEA	2148K 36001	BELL 412				VALVE L88010491	FAILED FUEL SYS		4/3/98 HEEA0013842
VALVE DOES NOT CYCLE.									

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2840 HEEA	2298Z 33077	BELL 412				PROBE 391046197	FAILED FUEL SYS		4/2/98 HEEA0013704
INDICATES HIGH OUT OF TOLERANCE; WIRE CRUSHED.									
2840 HEEA	6559Z 36019	BELL 412				SIGNAL COND 473203003	FAILS FUEL SYS		4/2/98 HEEA0013696
INTERMITTENTLY NEEDLE GOES TO ZERO.									
2841 HEEA	293CA	BELL 412				INDICATOR 393008047	STICKS FUEL QTY		4/2/98 HEEA0013722
INDICATOR STICKS AT 1000.									
2842 HEEA	5759N 33002	BELL 412				PROBE 391046200	FAILED FUEL QTY		4/2/98 HEEA0013785
FUEL QTY PROBE INACCURATE READINGS.									
2915 HEEA	2148K 36001	BELL 412				VALVE ASSY 212076006007	FAILED HYD PRESS		4/2/98 HEEA0013815
BYPASS BUTTON WILL NOT RESET.									
3413 HEEA	3893S 33022	BELL 412				INDICATOR RC30VIL	DEFECTIVE RATE OF CLIMB		4/2/98 HEEA0013689
SMALL SCREW LOOSE INSIDE RATE OF CLIMB GAUGE.									
3414 HEEA	3893P 33012	BELL 412				AIRSPEED IND 412075009105	FAILED COCKPIT		4/2/98 HEEA0013751
AIRSPEED INDICATOR NEEDLE DOES NOT RETURN TO ZERO.									
3414 HEEA	2261D 33076	BELL 412				AIRSPEED IND 412075009105	FAILED COCKPIT		4/2/98 HEEA0013748
AIRSPEED INDICATES LOW OUT OF TOLERANCE THROUGHOUT SCALE.									
3414 HEEA	23023 33080	BELL 412				AIRSPEED IND 412075009105	FAILED COCKPIT		4/2/98 HEEA0013747
AIRSPEED INDICATOR DOES NOT INDICATE BELOW 25 KNOTS.									
3416 HEEA	3893L 33006	BELL 412				INDICATOR 212070238003	LEAKING ALTIMETER		4/2/98 HEEA0013682
INDICATOR HAS EXCESSIVE CASE LEAK.									
3421 HEEA	3893L 33006	BELL 412				INDICATOR 1113034	PRECESSES COCKPIT		4/2/98 HEEA0013821
ATTITUDE INDICATOR PRECESSES.									
3421 HEEA	2261D 33076	BELL 412				INDICATOR 1113034	FAILED COCKPIT		4/2/98 HEEA0013831
ATTITUDE INDICATOR POPS CIRCUIT BREAKER.									

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3421 HEEA	142PH 33150	BELL 412				INDICATOR 1113034	STICKS ROLL COMMAND		4/2/98 HEEA0013732
ROLL COMMAND BAR STICKS IN CENTER POSITION.									
3421 HEEA	142PH 33150	BELL 412				INDICATOR 222375033103	FAILED COCKPIT		4/2/98 HEEA0013750
ATTITUDE INDICATOR EXCESSIVE ROLL IN PITCH ERECTION RATES.									
3421 HEEA	7128R 36007	BELL 412				INDICATOR 1113034	FAILED ROLL AXIS		4/2/98 HEEA0013733
INDICATOR CHATTER IN ROLL AXIS.									
3424 HEEA	3911L 33023	BELL 412				GYRO 214075244001	FAILED COCKPIT		4/2/98 HEEA0013691
TURN NEEDLE DOESN'T WORK. RATE GYRO FAILED									
3424 HEEA	7128R 36007	BELL 412				RATE GYRO 214075244001	FAILED COCKPIT		4/2/98 HEEA0013822
RATE TURN INDICATOR NO TURN NEEDLE MOVEMENT.									
5210 HEEA	22608 33075	BELL 412				TRACK ASSY 205030220010	MIS MFG RT DOOR		4/1/98 HEEA0013678
REMOVE AND REPLACE MISMANUFACTURED UPPER R/H DOOR TRACK ON AIRFRAME FWD SECTION.									
6230 HEEA	1202T 33112	BELL 412				MAST ASSY 412040101127	CORRODED M/R	3091	4/2/98 HEEA0013799
3100 HOUR INSPECTION. UNBONDED WEAR SLEEVE AND INSPECT T/D CORROSION ON UPPER MAST.									
6240 HEEA	107X 33113	BELL 412				DETECTOR 214074280107	FAILED RPM LIMIT		3/19/98 HEEA0013464
RPM LIMIT DETECTOR FAILED. CYCLE COUNTER TIME STAYS ON AT ALL TIMES.									
6240 HEEA	108X 33115	BELL 412				DETECTOR 214074280107	FAILED RPM LIMIT		3/26/98 HEEA0013570
LIGHTS INTERMITTENT FLASHING.									
6240 HEEA	7128R 36007	BELL 412				DETECTOR 214074280107	FAILED RPM LIMIT		4/2/98 HEEA0013793
RPM AUDIO INOPERATIVE CAUSES CYCLIC CENTER LIGHT TO COME ON.									
6320 HEEA	2261D 33076	BELL 412				OIL COOLER 8538100	LEAKING XMSN		4/2/98 HEEA0013817
OIL COOLER LEAKING.									
6710 HEEA	22608 33075	BELL 412				LINEAR ACTUATOR 204060762005	BROKEN M/R		4/2/98 HEEA0013830
LINEAR ACTUATOR TERMINAL STUD IS BROKEN.									

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6720 HEEA	293CA	BELL 412				ROLL CONTROL 7001483	FAILED T/R CONTROL		4/2/98 HEEA0013721
ROLL CONTROL KICKS IN BOTH CHANNEL IN ATT. MODE AND SAS MODE.									
7200 HEEA	3893P 33012	BELL 412				POWER SEC 3017600	FAILED ENGINE	13424	4/2/98 HEEA0013711
COMPRESSOR STALLS. INSPECT FOR CORROSION ON ACCESSORY GEARBOX.									
7323 HEEA	108X 33115	BELL 412	PWA PT6T3B		BENDIX	GOVERNOR 25249994	FAILED NR 2 ENGINE		3/7/98 98ZZZX1455
PILOT EXPERIENCED LOW SIDE GOVERNOR FAILURE SHORTLY AFTER TAKEOFF. RETURNED TO BASE AND LANDED WITHOUT INCIDENT. MAINTENANCE REPLACED NR 2 ENGINE POWER TURBINE GOVERNOR. REF: P&W IPC, CHAPTER 72-10-03, FIG 1, ITEM NR 10.									
7412 HEEA	23023 33080	BELL 412				EXCITER 103815501	FAILED ENG ING		4/2/98 HEEA0013792
EXCITER INTERMITTENT. CAUSED ENGINE TO FLAME OUT AT START, 40 N1.									
7712 HEEA	3893N 33010	BELL 412				INDICATOR 412075008111	FAILED ENG TORQUE		4/2/98 HEEA0013684
ENGINE INPUT BLOWS CIRCUIT BREAKER.									
7921 HEEA	2298Z 33077	BELL 412				OIL COOLER 209062501005	LEAKING ENG OIL		4/2/98 HEEA0013789
UNIT IS LEAKING.									
7931 HEEA	3893P 33012	BELL 412				INDICATOR 209070262101	FAILED ENG OIL		4/2/98 HEEA0013802
OIL PRESSURE IS HIGH.									
7931 HEEA	2298Z 33077	BELL 412				INDICATOR 209070262101	FAILED ENG OIL		4/2/98 HEEA0013801
OIL TEMP/PRESS INDICATOR FAILED.									
7931 HEEA	107X 33113	BELL 412				INDICATOR 209062002001	FAILED ENGINE		4/2/98 HEEA0013796
INDICATOR ALWAYS POPPED.									
2350 RMXA	911SV 2033	BOLKMS BO105LSA3				AUDIO PANEL AA95726	DEFECTIVE COCKPIT		1/29/98 98ZZZX1512
AUDIO PANEL SELECT KNOB INOPERATIVE. REMOVED AND REPLACED.									
2562 HEEA	54191 S804	BOLKMS BO105S				SWITCH 569880101	DEFECTIVE ELT		4/2/98 HEEA0013712
SWITCH CAUSES ELT TO GO OFF ALL THE TIME.									
2562 HEEA	54191 S804	BOLKMS BO105S			NARCO	ELT ELT910	FAILED COCKPIT		4/2/98 HEEA0013741
INADVERTENT ACTIVATION FOR UNKNOWN PERIODS OF TIME.									

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2844 HEEA	911EB S812	BOLKMS BO105S				TRANSDUCER BSE206150G3	FAILED FUEL SYS		4/2/98 HEEA0013702
TRANSDUCER HIGH OUT OF TOLERANCE THROUGHOUT.									
2844 HEEA	81832 S828	BOLKMS BO105S				TRANSDUCER BSE206150G3	FAILED FUEL PRESS		4/2/98 HEEA0013743
TRANSDUCER READS HIGH OUT OF TOLERANCE.									
3213 HEEA	5029H S670	BOLKMS BO105S				SKID 10550103	CORRODED END CAP		4/2/98 HEEA0013776
CORROSION PITS INSIDE OF TUBE AT FWD. END CAP.									
3340 HEEA		BOLKMS BO105S				POWER SUPPLY A413A	FAILED STROBE		4/2/98 HEEA0013701
POWER SUPPLY INOPERATIVE.									
3340 HEEA	3071K S859	BOLKMS BO105S				POWER SUPPLY A413AHDADF28V	FAILED STROBE		4/2/98 HEEA0013787
STROBE POWER SUPPLY INOPERATIVE.									
3421 RMXA	105NG S632	BOLKMS BO105S				GYRO 5040017901	FAILED COCKPIT		2/7/98 98ZZZX1506
ATTITUDE GYRO FAILED ON OPS CHECK. SPINS LIKE A TOP. REMOVED AND REPLACED.									
3457 HEEA	81982 S818	BOLKMS BO105S			GPS150	GPS 0110005400	DEFECTIVE COCKPIT		4/3/98 HEEA0013837
DUE 2 YEAR INSPECTION. PERFORMED PRELIMINARY INSPECTION AND FOUND GPS HAS SEVERAL BUTTONS TO BE UNREADABLE AND ALSO BACKUP BATTERY IS DEAD.									
3457 HEEA	81832 S828	BOLKMS BO105S				ANTENNA 1624811	FAILED GPS		4/2/98 HEEA0013834
GPS INDICATES ANTENNA FAILED AND SHOWS 1.0 VOLTS.									
3610 HEEA		BOLKMS BO105S				VALVE 97914211	FAILED PNEU SYS		3/26/98 HEEA0013650
VALVE HAS PIECES BROKEN INSIDE.									
6240 HEEA	818SH S753	BOLKMS BO105S				INDICATOR 10594564	FAILED MAST MOMENT		4/2/98 HEEA0013723
MAST MOMENT INDICATOR INDICATES ZERO.									
6240 HEEA	818SH S753	BOLKMS BO105S				TRANSMITTER 10594575	FAILED MAST MOMENT		4/2/98 HEEA0013724
MAST MOMENT INDICATES ZERO.									
6320 HEEA	5029H S670	BOLKMS BO105S				LOWER HOUSING 4638201004	WORN M/R XMSN		4/2/98 HEEA0013760
M/R GR BOX LOWER HOUSING SEAT WORN, LOOSE INSIDE LINERS.									

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6520 HEEA	5029H S670	BOLKMS BO105S				CENTER CASE 4638201003	WORN T/R		4/2/98 HEEA0013752
T/R BORE WORN AND LOOSE LINERS (3 EACH).									
6520 HEEA	133AE S800	BOLKMS BO105S				CENTER CASE 4638201003	WORN T/R		4/2/98 HEEA0013686
T/R BORE NOZZLE RING SEAT AND SUPPORT PIN SEAT DUE TO WEAR.									
7260 HEEA	86CH S557	BOLKMS BO105S	ALLSN 250C20B		6894171	GEARBOX COVER 23055464	LEAKING AFT TM BORE		3/30/98 HEEA0013667
ENGINE REMOVED DUE TO AFT T/M LEAK. INSPECTION REVEALED: LEAKING AT COVER AFT T/M BORE.									
7320 RMXA	911LF S663	BOLKMS BO105S	ALLSN 250C20B			ACTUATOR 1564T1005	FAILED NR 2 ENG CONTROL		3/27/98 98ZZZX1503
FOLLOWING TAKEOFF, RPM WARNING LIGHT, ATTEMPTED TO BEEP ENGINES DOWN - ONLY NR 1 RESPONDED. RETURNED AND EMERGENCY LANDING MADE. FOUND NR 2 ACTUATOR INOPERABLE. PARTS ON ORDER.									
7714 HEEA	5421E S806	BOLKMS BO105S				INDICATOR DL41239	ERRATIC SINGLE RPM		4/2/98 HEEA0013734
ERRATIC ON STARTUP AND SHUTDOWN.									
7714 HEEA	5421E S806	BOLKMS BO105S				INDICATOR DL41239	STICKS SINGLE RPM		4/2/98 HEEA0013727
INDICATOR INTERMITTENTLY STICKS AT ZERO.									
7722 HEEA	5029H S670	BOLKMS BO105S				INDICATOR 10590947	FAILED TOT		4/2/98 HEEA0013708
TOT INDICATOR WILL NOT CALIBRATE AND POINTER NEEDS REFACING.									
7722 HEEA	5029H S670	BOLKMS BO105S				INDICATOR 50061036	FAILED EXH TEMP		4/2/98 HEEA0013735
EXH TEMP INDICATOR FAILS CALIBRATION CHECK.									
7722 HEEA	624MB S751	BOLKMS BO105S				INDICATOR 50061036	STICKS EXH TEMP		4/2/98 HEEA0013737
EXH TEMP NEEDLE STICKS ON HIGH SIDE.									
2210 HEEA	7040U 7180	BOLKMS BK117B1			PC700	AUTOPILOT 7000299908	FAILED COCKPIT		3/26/98 HEEA0013629
API WORKS INTERMITTENTLY, SAS/ATT DOES NOT WORK.									
2210 HEEA	134AE 7237	BOLKMS BK117B2				TRANSDUCER 11788810	MALFUNCTION CSAS		4/2/98 HEEA0013827
TRANSDUCER CAUSES ERRATIC READINGS.									
2211 RMXA	214AE 7206	BOLKMS BK117B1				COMPUTER 7004206901	FAILED CSAS		2/14/98 98ZZZX1508
CSAS COMPUTER PITCH AND ROLL LIGHT STAYS ON. REMOVED AND REPLACED.									

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2312 RMXA	217MC 7195	BOLKMS BK117B1			RT138F	TRANSCEIVER 40001452500	DEFECTIVE COCKPIT		2/26/98 98ZZZX1505
TRANSCEIVER PL TONE MODULATION IS INDICATING 1.8 HKZ TO 2.1 KHZ. CHECKED SPECS - SHOULD BE AROUND .75 TO .8 KHZ. REMOVED AND REPLACED.									
2820 HEEA	132AE 7238	BOLKMS BK117B2				FUEL FILTER NR 2 ENG FILTER	WARNING LIGHT		4/2/98 98ZZZX1496
ON APRIL 2, 1998 AT 1236 IN CRUISE FLIGHT, NR 2 ENGINE FUEL FILTER LIGHT ILLUMINATED. RETURNED TO GLENDALE AIRPORT. TROUBLESHOOTING IN PROGRESS.									
2821 HEEA	132AE 7238	BOLKMS BK117B2				FUEL FILTER 430129501	CONTAMINATED FUEL 1-2		3/30/98 98ZZZX1497
ON MARCH 30, 1998 DURING CRUISE FLIGHT, NR 2 FUEL FILTER LIGHT CAME ON. PILOT TURNED A/C TO RETURN TO BASE. APPROXIMATELY 5 MINUTES LATER, THE NR 1 FUEL FILTER LIGHT ILLUMINATED. LANDED IN THE DESERT ONE MILE SOUTH OF WITTMAN, AZ. MAINTENANCE SAMPLED FUEL, REPLACED FILTER ELEMENTS. NO ABNORMALITIES NOTED. REPLACED NR 1 ENGINE FUEL FILTER ASSY AND FUEL PUMP. SUSPECT ROOT CAUSE WAS MOISTURE IN BOTH ENGINE FUEL FILTER SWITCHES. (THERE HAD BEEN RECORD RAINFALL IN THE PRECEDING DAYS).									
3310 RMXA	118LL 7097	BOLKMS BK117A3				CONTROL UNIT 1179203103	FAILED COCKPIT		3/1/98 98ZZZX1499
INTERNAL MALFUNCTION OF COPILOT INSTRUMENT LIGHTING CONTROL UNIT. WHEN CONTROL UNIT FAILED, IT PRODUCED SMOKE AND ELECTRICAL FUMES ACCORDING TO PILOT.									
3340 RMXA	117LU 7144	BOLKMS BK117B1				LIGHT 30050423	FAILED ANTI COLLISION	15	2/5/98 98ZZZX1517
ANTI-COLLISION STROBE INOPERATIVE. REMOVED AND REPLACED.									
3421 RMXA	214AE 7206	BOLKMS BK117B1				ARTIFICAL HORIZ 4021541671	MALFUNCTIONED COCKPIT		2/13/98 98ZZZX1507
ARTIFICAL HORIZON PITCH AND ROLL CSAS WILL NOT ENGAGE. REMOVED AND REPLACED.									
6210	128HH 7036	BOLKMS BK117A1				BEARING 601741	CRACKED BLUE M/R BLADE		3/18/98 98ZZZX1473
NOTICED BLUE M/R BLADE PENDULUM ABSORBER SOUNDED ROUGH ON PRE-FLIGHT INSPECTION. SUSPECT CAUSE, LACK OF LUBRICATION.									
6410 RMXA	170MC 7217	BOLKMS BK117B1				BLADE 11731743	DEBONDED T/R	292	1/11/98 98ZZZX1516
TAIL ROTOR BLADE DEBONDING. REMOVED AND REPLACED.									
6410 BAQA	213AE 7219	BOLKMS BK117B1				BLADE 11731743	ERODED T/R	567	3/25/98 98ZZZX1501
EXCESSIVE EROSION OF T/R BLADES SURFACE PROTECTION. THE PAINT HAS COME OFF IN LARGE STRIPS AND THEN THE RUBBERIZED EROSION PROTECTION STARTS FLAKING OFF.									
6410 BAQA	213AE 7219	BOLKMS BK117B1				BLADE 11731743	ERODED T/R	567	3/25/98 98ZZZX1500
EXCESSIVE EROSION OF T/R BLADES SURFACE PROTECTION. THE PAINT HAS COME OFF IN LARGE STRIPS AND THEN THE RUBBERIZED EROSION PROTECTION STARTS FLAKING OFF.									
2211 RMXA	117NC 7509	BOLKMS BK117C1				COMPUTER 7004206901	FAILED COCKPIT		1/30/98 98ZZZX1513
CSAS COMPUTER INTERMITTENT. ROLL AND PITCH CHANNELS BOTH DROP OFF-LINE AND CANNOT BE RESET OR JUST WILL NOT COME ON-LINE. REMOVED AND REPLACED.									

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DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2211 RMXA	117NC 7509	BOLKMS BK117C1			88030204	COMPUTER 7004206901	FAILED CSAS		2/6/98 98ZZZX1509
CSAS COMPUTER PITCH LIGHT ILLUMINATED INTERMITTENTLY IN-FLIGHT. REMOVED AND REPLACED.									
2810 RMXA	117NC 7509	BOLKMS BK117C1				VALVE P401	FAILED FUEL VENT	472	1/9/98 98ZZZX1511
VENT VALVE FAILED. REMOVED AND REPLACED.									
2810 RMXA	117NC 7509	BOLKMS BK117C1				VALVE P401	FAILED FUEL VENT		1/9/98 98ZZZX1510
VENT VALVE FAILURE. ALLOWS FUEL TO VENT. REMOVED AND REPLACED.									
6720 RMXA	317MC 7505	BOLKMS BK117C1				PITCH LINK 11731822	WORN T/R		6/19/97 98ZZZX1515
BEARINGS WORN IN PITCH LINK ASSY. REMOVED AND REPLACED.									
6720 RMXA	317MC 7505	BOLKMS BK117C1				PITCH LINK 11731822	WORN T/R		7/22/97 98ZZZX1514
PITCH LINK ASSY HAS WORN BEARINGS. REMOVED AND REPLACED.									
3160 R7MA	901CF 90000012	DOUG MD900				DISPLAY 900A3720002107	FAILED COCKPIT	344	3/10/98 98ZZZX1502
DISPLAY SYSTEM UNIT INOPERATIVE. LOWER HALF OF DISPLAY IS DIMMER (APPROXIMATELY BY HALF) THAN THE UPPER HALF. REPLACED WITH REPAIRED UNIT. CORRECTED PROBLEM.									
6210 OG5R	46EE 0406E	HUGHES 369E				BLADE	UNBONDED M/R	2792	3/1/98 98ZZZX1495
DURING SCHEDULED INSPECTION, FOUND LOWER ROOT FITTING TO DOUBLER BOND LINE ADHESIVE MISSING. AREA OF MISSING ADHESIVE WAS APPROXIMATELY 1 INCH LONG AND .100 INCH UNDER ROOT FITTING. BLADE WAS SENT TO BLADE REPAIR FACILITY AND FOUND TO BE UNREPAIRABLE. BLADE WAS SCRAPPED. AREA OF DEFECT WAS ON LEADING SIDE OF LOWER ROOT FITTING. INSTALLED NEW BLADE.									
6220 CHIR		HUGHES 369C				HOUSING 369A1305	MISMANUFACTURED FEATHER BEARING		3/23/98 CHI2080
OPERATOR RECEIVED 2 NEW 369A1305 FEATHERING BEARING HOUSINGS THAT DID NOT HAVE THE HOLE DRILLED TO ATTACH THE 369D21333-3 STRIKER PLATE. THE FIRST ONE DID NOT HAVE THE HOLE DRILLED, THE SECOND ONE ORDERED UNDER WARRANTY DID NOT HAVE THE HOLE EITHER. SUBMITTER STATED NO QUALITY CONTROL AT MDHS. CALLED AND ADVISED MDHS AFTER THE FIRST ONE AND ASKED THEM TO LOOK AT THE NEXT ONE THEY SENT TO BE SURE HOLE WAS THERE. (X)									
7314 LS1R	500DC 290456D	HUGHES 369D	ALLSN		250C20B	FUEL PUMP 3865005	FAILED ENGINE	2502	3/30/98 98ZZZX1494
FAILED BYPASS CHECK AT 100 HOUR INSPECTION. FUEL PUMP REMOVED AND SENT FOR OVERHAUL EVALUATION.									
6710 *****	313KA 940019	KAMAN K1200				LIMITER K982100001	BINDING COLLECTIVE CRANK	1385	1/14/98 98ZZZX1408
PILOT REPORTED COLLECTIVE LIMITER BINDING HARD TO MOVE UP OR DOWN: 12 EACH LIMITERS WERE INSTALLED. AFTER EACH INSTALL, AIRCRAFT OPERATIONS REPORTED NORMAL. 12-10-97: COLLECTIVE LIMITER INPUT CRANK FOUND TO HAVE INTERMITTENT BINDING ON COLLECTIVE SHAFT AT DISASSEMBLY. CORROSION FOUND ON SHAFT (STEEL) OUTSIDE DIAMETER AND CRANK (ALUMINUM) 1.0. AT EACH LIMITER CHANGE, THE BINDING OF THE CRANK TO THE SHAFT WAS LOOSENED AND OPERATIONS WERE NORMAL FOR A RANGE OF OPERATING HOURS FROM 34.6 TO 261.4 HOURS. NO PART NUMBERS ARE LISTED FOR THE CRANK OR SHAFT. RECOMMEND A MIL SPEC CORROSION INHIBITOR AND LUBRICANT BE APPLIED TO THE COLLECTIVE CRANK AND SHAFT.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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2210 HEEA	1547D 760077	SKRSKY S76A				MAGNETIC BRAKE 7690001812102	FAILED AUTOFLIGHT		4/2/98 HEEA0013749
LATERAL FORCE TRIM INOPERATIVE.									
2420 HEEA	5128 760181	SKRSKY S76A				GENERATOR CONTRO 7655009005108	FAILED AC SYS		4/2/98 HEEA0013816
A/C GENERATOR WOULD NOT COME ON BY ITSELF.									
2562 HEEA	1547D 760077	SKRSKY S76A			NARCO	ELT ELT910	MALFUNCTION COCKPIT		4/2/98 HEEA0013740
ELT TRANSMITS INTERMITTENTLY WHEN OFF ON ARM.									
2611 HEEA	1545X 760050	SKRSKY S76A				DETECTOR 30231R7B	INTERMITTENT SMOKE DET		4/2/98 HEEA0013719
SMOKE DET INTERMITTENT WARNING LIGHTS.									
2913 HEEA	3122H 760233	SKRSKY S76A				HYD PUMP 7665009808101	WORN HYD SYS		4/2/98 HEEA0013819
SPLINE WORN ON INTERNAL AND EXTERNAL DRIVE SHAFTS.									
2932 HEEA	4253S 760035	SKRSKY S76A				TRANSMITTER 7645001078121	FAILED HYD SYS		4/2/98 HEEA0013692
HYD TRANSMITTER OCCASSIONALLY INDICATES MIN.									
3120 HEEA	4253S 760035	SKRSKY S76A				DIGITAL CLOCK 811B	FAILED COCKPIT		4/3/98 HEEA0013839
CLOCK WILL NOT KEEP CORRECT TIME.									
3414 HEEA	1546G 760076	SKRSKY S76A				AIRSPEED IND 8502CS20LW	CRACKED COCKPIT		4/2/98 HEEA0013746
AIRSPEED INDICATOR INLET POTS CRACKED.									
3416 HEEA	5426U 760167	SKRSKY S76A				INDICATOR 212070238007	LEAKAGE COCKPIT		4/3/98 HEEA0013844
ALTIMETER EXCESSIVE CASE LEAKAGE.									
3416 HEEA	5426U 760167	SKRSKY S76A				INDICATOR 212070238003	FAILED COCKPIT		4/3/98 HEEA0013846
INDICATOR IS OUT OF TOLERANCE AT 18,000 FEET. FAILED BEFORE AND AFTER TEST.									
3421 HEEA	22342 760096	SKRSKY S76A				GYRO 501145301	FAILED COCKPIT		4/2/98 HEEA0013705
VERT GYRO WILL NOT SPOOL UP.									
3421 HEEA	5426U 760167	SKRSKY S76A				VERTICAL GYRO 7660002113103	MALFUNCTION NR 1 PITCH		4/2/98 HEEA0013772
NR 1 PITCH KICKS IN LEVEL FLIGHT.									

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DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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3421 HEEA	911MJ 760231	SKRSKY S76A				VERTICAL GYRO 7660002113103	FAILED COCKPIT		4/2/98 HEEA0013745
	STARTED TUMBLING IN FLIGHT.								
3423 HEEA	31217 760229	SKRSKY S76A				COMPASS CB212528A	DEFECTIVE COCKPIT		4/2/98 HEEA0013683
	COMPASS FLUID LEVEL IS LOW.								
3444 HEEA	1546G 760076	SKRSKY S76A				TRANSCIVER 7001840913	FAILED RADAR ALT		4/2/98 HEEA0013742
	FAILED TEST 1.1 (NOT VALID)								
3452 HEEA	22342 760096	SKRSKY S76A				TRANSPONDER 066107100	FAILED COCKPIT		4/2/98 HEEA0013710
	TRANSPONDER INOPERATIVE ALSO CAPACITY C507 IS BAD.								
3610 HEEA	31217 760229	SKRSKY S76A				VALVE 7650007903102	FAILED BLEED SOV		4/2/98 HEEA0013756
	BLEED SOV INOPERATIVE.								
6220 HEEA	1546G 760076	SKRSKY S76A				DAMPER 7610608000049	LEAKING M/R		4/2/98 HEEA0013807
	DAMPER IS WEAK AND LEAKING.								
7931 HEEA	1545X 760050	SKRSKY S76A				INDICATOR 7645001078101	FLUCTUATES ENG OIL		4/2/98 HEEA0013736
	NEEDLE FLUCTUATES AT 50' INTERMITTENTLY.								
2435 HEEA	40466 3004	SNIAS AS350B2				GENERATOR 150SG122Q	NOISY START/GEN	381	4/2/98 HEEA0013679
	RADIO INTERFERENCE. INSPECTED BY ACCESSORY OVERHAUL SHOP AND FOUND BRUSHES EXCESSIVELY WORN, COMMUTATOR PITTED AND ARMATURE IS SHORTED.								
7210 HEEA	4034Q 2918	SNIAS AS350B2				MAGNETIC SEAL 9560137520	LEAKING ENGINE		3/26/98 HEEA0013614
	MAGNETIC LEAKING.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES**4/12/98 - 4/18/98 ISSUE: 98-16 ZAC-327**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7314 HEEA	8591X 51495	BELL 206L3				FUEL PUMP 3881005	WORN FUEL SYS		4/2/98 HEEA0013833
WORN DRIVE SHAFT SPLINES AND GEAR SPLINES.									
7200 HEEA	3893P 33012	BELL 412				POWER SEC 3017600	FAILED ENGINE	13424	4/2/98 HEEA0013711
COMPRESSOR STALLS. INSPECT FOR CORROSION ON ACCESSORY GEARBOX.									
7323 HEEA	108X 33115	BELL 412	PWA PT6T3B		BENDIX	GOVERNOR 25249994	FAILED NR 2 ENGINE		3/7/98 98ZZZX1455
PILOT EXPERIENCED LOW SIDE GOVERNOR FAILURE SHORTLY AFTER TAKEOFF. RETURNED TO BASE AND LANDED WITHOUT INCIDENT. MAINTENANCE REPLACED NR 2 ENGINE POWER TURBINE GOVERNOR. REF: P&W IPC, CHAPTER 72-10-03, FIG 1, ITEM NR 10.									
7412 HEEA	23023 33080	BELL 412				EXCITER 103815501	FAILED ENG ING		4/2/98 HEEA0013792
EXCITER INTERMITTENT. CAUSED ENGINE TO FLAME OUT AT START, 40 N1.									
7260 HEEA	86CH S557	BOLKMS BO105S	ALLSN 250C20B			GEARBOX COVER 23055464	LEAKING AFT TM BORE		3/30/98 HEEA0013667
ENGINE REMOVED DUE TO AFT T/M LEAK. INSPECTION REVEALED: LEAKING AT COVER AFT T/M BORE.									
7320 RMXA	911LF S663	BOLKMS BO105S	ALLSN 250C20B			ACTUATOR 1564T1005	FAILED NR 2 ENG CONTROL		3/27/98 98ZZZX1503
FOLLOWING TAKEOFF, RPM WARNING LIGHT, ATTEMPTED TO BEEP ENGINES DOWN - ONLY NR 1 RESPONDED. RETURNED AND EMERGENCY LANDING MADE. FOUND NR 2 ACTUATOR INOPERABLE. PARTS ON ORDER.									
8530	54048 17274857	CESSNA 172P	LYC O320D2J			VALVE SEAT	DAMAGED NR 3 CYL EXH VLV	4627 505	3/18/98 98ZZZX1448
DURING AIRCRAFT RUN-UP, THE PILOT NOTICED THE ENGINE WAS RUNNING ROUGH. THE MECHANIC PULLED A COMPRESSION CHECK AND FOUND THAT NR 3 CYLINDER HAD NO COMPRESSION. FURTHER INVESTIGATING AND CYLINDER REMOVAL SHOWED THE EXHAUST VALVE SEAT INSIDE THE CYLINDER HAD SLIPPED OUT FROM ITS GROOVE; THUS, NOT ALLOWING FOR PROPER VALVE SEATING.									
8530		CESSNA 172R	LYC O360F1A6			ROCKER SHAFT	LOOSE NR 3 EXH-INT	2	4/8/98 98ZZZX1471
A DEAD CYLINDER CAUSED AIRCRAFT TO LAND. TROUBLESHOOTING FOUND NR 3 CYLINDER DEAD. WHEN REMOVING THE VALVE COVER, FOUND THE INTAKE AND EXHAUST ROCKER SHAFTS LOOSE AND ONE RETAINING NUT WAS INSIDE THE VALVE COVER. THE ACFT HAD JUST BEEN RETURNED TO SERVICE 2 TACK HOURS EARLIER, THE LOG BOOK SHOWED THAT ALL PUSH ROD SEALS WERE REPLACED DUE TO OIL LEAKS. THE OIL SEALS WERE REPLACED BUT UPON RE-INSTALLATION OF THE ROCKER SHAFT, THE MECHANIC USED STAR WASHERS TO SECURE THE PLAIN NUTS INTO PLACE. THE CONTINENTAL ENGINE MANUALS CALLS FOR A LOCK P/N 50186. NEW LOCKS INSTALLED (24 EACH) ON ALL ROCKER SHAFT RETAINING NUTS AND CRIMP LOCKED AS REQUIRED. NO HARM WAS DONE AND GROUND RUN-UP WAS SATISFACTORY.									
7322 *****	9109G 18260649	CESSNA 182N	CONT O470P		FACET MA45	PLUG 9944	MISSING CARBURETOR BOWL	1752	3/3/98 98ZZZX1476
FOLLOWING TAKEOFF, ENGINE RUNNING ROUGH AND FIRE ERUPTED. AFTER LANDING, INSPECTION FOUND FIRE IN ENGINE COMPARTMENT DUE TO MISSING DRAIN PLUG FROM CARBURETOR BOWL. NO SAFETY WIRE EVIDENT.									
8530	9438M U20604546	CESSNA TU206G	CONT TSIO520M			GASKET 653191	LEAKS CYL NR 3 ROCKER	9	3/30/98 98ZZZX1454
A SMALL OIL LEAK ON NR 3 CYLINDER WAS REPAIRED BY INSTALLING A NEW P/N 653191 ROCKER COVER GASKET. NINE HOURS LATER, A LARGE OIL LEAK WAS EVIDENT, CYLINDER NR 3. UPON PULLING COVER, FOUND GASKET HAD SHRUNK CAUSING OIL LEAK WHERE THE GASKET WENT STRAIGHT BETWEEN TWO SCREWS.									

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DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES (cont'd)

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7200	177GC	DHAV	PWA			ENGINE	FAILED	23907	2/10/98
GCNA	263	DHC6300	PT6A27				LEFT	11918	98ZZZX1488
LEFT ENGINE TORQUE PRESSURE DROPPED TO ZERO AFTER SLIGHT POWER REDUCTION, CAME BACK UP TO ABOUT 4 PSI, POWER INCREASED TO 15 PSI. AFTER ANOTHER SLIGHT POWER REDUCTION, TORQUE DROPPED TO ZERO AND OIL PRESSURE DROPPED BELOW 40 PSI. FEATHERED AND SECURED ENGINE. ONCE ON GROUND, MAINTENANCE PERSONNEL RESTARTED ENGINE AND PERFORMED A THOROUGH GROUND RUN, AND COULD NOT DUPLICATE PROBLEM OR FIND ANY DISCREPANCIES. REPLACED THE FUEL CONTROL UNIT AS A PRECAUTIONARY MEASURE BECAUSE NO DISCREPANCIES IN THE ENGINE, ENGINE ACCESSORIES, OR ENGINE SYSTEMS COULD BE FOUND.									
7314	500DC	HUGHES	ALLSN			FUEL PUMP	FAILED	2502	3/30/98
LS1R	290456D	369D	250C20B			3865005	ENGINE		98ZZZX1494
FAILED BYPASS CHECK AT 100 HOUR INSPECTION. FUEL PUMP REMOVED AND SENT FOR OVERHAUL EVALUATION.									
8500	72013	LUSCOM	CONT			ENGINE	MALFUNCTIONED	5147	12/14/97
	3440	8A	A658				POWER SECTION	121	98ZZZX1457
PILOT REPORTED ENGINE QUIT IN-FLIGHT, PILOT EXECUTED AN EMERGENCY OFF-AIRPORT LANDING. MINOR DAMAGE TO AIRCRAFT. ENGINE INSPECTED, BUT NOT DISASSEMBLED, ENGINE OIL WAS CLEAN, NO METAL FOUND IN OIL, 6 GALLONS OF FUEL (APPROX) FOUND IN TANKS, ENGINE COMPRESSION APPEARS NORMAL, ENGINE TURNS SMOOTH AND NORMAL NOT TIGHT FROM POSSIBLE LOCK-UP. MAGNETO TIMER OK. NO DISCREPANCIES FOUND.									
8530	2204A	PIPER	LYC			RETAIN SPRING	BROKEN	79	4/1/98
CQVR	287911006	PA28236	O540J3A5			LW14995	SHROUD TUBE		98ZZZX1452
FOUND OIL LEAKING FROM COWL. REMOVED COWL. FOUND NR 6 CYLINDER EXHAUST PUSH ROD MOVED INTO UPPER CYLINDER. REMOVED ROCKER COVER. FOUND SHROUD TUBE RETAINING SPRING BROKEN. EXAMINED OTHER 5 CYLINDERS. FOUND ONE MORE BROKEN SPRING AND 2 CRACKED SPRINGS. REPLACED ALL SPRINGS WITH NEW. EITHER LYCOMING HAS ANOTHER PROBLEM OR THESE SPRINGS WERE MISSED BY LYCOMING SB 519.									
7210	4034Q	SNIAS				MAGNETIC SEAL	LEAKING		3/26/98
HEEA	2918	AS350B2				9560137520	ENGINE		HEEA0013614
MAGNETIC LEAKING.									

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS**4/12/98 - 4/18/98 ISSUE: 98-16 ZAC-327**

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3416 HEEA	406EH 45183	BELL 206L1				ALTIMETER 59341	LEAKS COCKPIT		4/2/98 HEEA0013685
ALTIMETER LEAKED DURING 12 MONTH INSPECTION.									
3416 HEEA	3892R 45594	BELL 206L1				ALTIMETER 59341	LEAKING COCKPIT		4/2/98 HEEA0013773
ALTIMETER LEAKING AT KNOB.									
3421 HEEA	8591X 51495	BELL 206L3				GYRO 206075607103	FAILED COCKPIT		4/2/98 HEEA0013709
ATTITUDE GYRO SPINS AND WILL NOT CAGE.									
3422 HEEA	2777D 45299	BELL 206L1				GYRO RCA15BK1	FAILED COCKPIT		4/2/98 HEEA0013761
DIR GYRO CAGING SHAFT STICKS. PRECESSES AND GLASS FOGS.									
3424 HEEA	108PH 51334	BELL 206L3				INDICATOR 206070274005	FAILED COCKPIT		4/2/98 HEEA0013764
INDICATOR STAYS 1/2 BALL OFF.									
3453 HEEA	41791 51465	BELL 206L3			KA83	ANTENNA 071143100	FAILED LORAN		4/2/98 HEEA0013835
LORAN UNIT NOT RECEIVING SIGNAL.									
3457 LS1R	9907K 2040	BELL 206B3			GARMIN INTL GPS150	GPS 0110005400	FAILED COCKPIT		3/30/98 98ZZZX1492
GPS WAS RETURNED FROM OVERHAUL. BATTERY LOW LIGHT STAYED ON. UNIT WOULD NOT PICK UP SATELLITES.									
3120 HEEA	102PH 30899	BELL 212				DIGITAL CLOCK 811B	DEFECTIVE COCKPIT		4/3/98 HEEA0013841
COATING ON FACE IS MISSING AND BATTERY IS DEAD.									
2210 HEEA		BELL 412				COMPUTER 4025008918	FAILED AFCS		4/2/98 HEEA0013800
COMPUTER AFCS WILL NOT TEST PROPERLY.									
2210 HEEA	5759N 33002	BELL 412				TARSYN 2593996333	FAILED AUTO FLIGHT		4/2/98 HEEA0013825
HEADING PRECESSES AND FAILS TEST 8.5 ON SST.									
2210 HEEA	7128R 36007	BELL 412				TARSYN 2593996333	FAILED AUTO FLIGHT		4/2/98 HEEA0013774
TARSYN WILL NOT SLAVE TO CONVERT HEADINGS.									
3413 HEEA	3893S 33022	BELL 412				INDICATOR RC30VIL	DEFECTIVE RATE OF CLIMB		4/2/98 HEEA0013689
SMALL SCREW LOOSE INSIDE RATE OF CLIMB GAUGE.									

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DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS (cont'd)

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3414 HEEA	3893P 33012	BELL 412				AIRSPED IND 412075009105	FAILED COCKPIT		4/2/98 HEEA0013751
AIRSPED INDICATOR NEEDLE DOES NOT RETURN TO ZERO.									
3414 HEEA	2261D 33076	BELL 412				AIRSPED IND 412075009105	FAILED COCKPIT		4/2/98 HEEA0013748
AIRSPED INDICATES LOW OUT OF TOLERANCE THROUGHOUT SCALE.									
3414 HEEA	23023 33080	BELL 412				AIRSPED IND 412075009105	FAILED COCKPIT		4/2/98 HEEA0013747
AIRSPED INDICATOR DOES NOT INDICATE BELOW 25 KNOTS.									
3416 HEEA	3893L 33006	BELL 412				INDICATOR 212070238003	LEAKING ALTIMETER		4/2/98 HEEA0013682
INDICATOR HAS EXCESSIVE CASE LEAK.									
3421 HEEA	3893L 33006	BELL 412				INDICATOR 1113034	PRECESSES COCKPIT		4/2/98 HEEA0013821
ATTITUDE INDICATOR PRECESSES.									
3421 HEEA	2261D 33076	BELL 412				INDICATOR 1113034	FAILED COCKPIT		4/2/98 HEEA0013831
ATTITUDE INDICATOR POPS CIRCUIT BREAKER.									
3421 HEEA	142PH 33150	BELL 412				INDICATOR 1113034	STICKS ROLL COMMAND		4/2/98 HEEA0013732
ROLL COMMAND BAR STICKS IN CENTER POSITION.									
3421 HEEA	142PH 33150	BELL 412				INDICATOR 222375033103	FAILED COCKPIT		4/2/98 HEEA0013750
ATTITUDE INDICATOR EXCESSIVE ROLL IN PITCH ERECTION RATES.									
3421 HEEA	7128R 36007	BELL 412				INDICATOR 1113034	FAILED ROLL AXIS		4/2/98 HEEA0013733
INDICATOR CHATTER IN ROLL AXIS.									
3424 HEEA	3911L 33023	BELL 412				GYRO 214075244001	FAILED COCKPIT		4/2/98 HEEA0013691
TURN NEEDLE DOESN'T WORK. RATE GYRO FAILED									
3424 HEEA	7128R 36007	BELL 412				RATE GYRO 214075244001	FAILED COCKPIT		4/2/98 HEEA0013822
RATE TURN INDICATOR NO TURN NEEDLE MOVEMENT.									
2350 RMXA	911SV 2033	BOLKMS BO105LSA3				AUDIO PANEL AA95726	DEFECTIVE COCKPIT		1/29/98 98ZZZX1512
AUDIO PANEL SELECT KNOB INOPERATIVE. REMOVED AND REPLACED.									

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DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS (cont'd)

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2562 HEEA	54191 S804	BOLKMS BO105S			NARCO	ELT ELT910	FAILED COCKPIT		4/2/98 HEEA0013741
INADVERTENT ACTIVATION FOR UNKNOWN PERIODS OF TIME.									
2562 HEEA	54191 S804	BOLKMS BO105S				SWITCH 569880101	DEFECTIVE ELT		4/2/98 HEEA0013712
SWITCH CAUSES ELT TO GO OFF ALL THE TIME.									
3421 RMXA	105NG S632	BOLKMS BO105S				GYRO 5040017901	FAILED COCKPIT		2/7/98 98ZZZX1506
ATTITUDE GYRO FAILED ON OPS CHECK. SPINS LIKE A TOP. REMOVED AND REPLACED.									
3457 HEEA	81982 S818	BOLKMS BO105S			GPS150	GPS 0110005400	DEFECTIVE COCKPIT		4/3/98 HEEA0013837
DUE 2 YEAR INSPECTION. PERFORMED PRELIMINARY INSPECTION AND FOUND GPS HAS SEVERAL BUTTONS TO BE UNREADABLE AND ALSO BACKUP BATTERY IS DEAD.									
3457 HEEA	81832 S828	BOLKMS BO105S				ANTENNA 1624811	FAILED GPS		4/2/98 HEEA0013834
GPS INDICATES ANTENNA FAILED AND SHOWS 1.0 VOLTS.									
2210 HEEA	7040U 7180	BOLKMS BK117B1			PC700	AUTOPILOT 7000299908	FAILED COCKPIT		3/26/98 HEEA0013629
API WORKS INTERMITTENTLY, SAS/ATT DOES NOT WORK.									
2210 HEEA	134AE 7237	BOLKMS BK117B2				TRANSDUCER 11788810	MALFUNCTION CSAS		4/2/98 HEEA0013827
TRANSDUCER CAUSES ERRATIC READINGS.									
2211 RMXA	214AE 7206	BOLKMS BK117B1				COMPUTER 7004206901	FAILED CSAS		2/14/98 98ZZZX1508
CSAS COMPUTER PITCH AND ROLL LIGHT STAYS ON. REMOVED AND REPLACED.									
2312 RMXA	217MC 7195	BOLKMS BK117B1			RT138F	TRANSCIEVER 40001452500	DEFECTIVE COCKPIT		2/26/98 98ZZZX1505
TRANSCIEVER PL TONE MODULATION IS INDICATING 1.8 HKZ TO 2.1 KHZ. CHECKED SPECS - SHOULD BE AROUND .75 TO .8 KHZ. REMOVED AND REPLACED.									
3421 RMXA	214AE 7206	BOLKMS BK117B1				ARTIFICAL HORIZ 4021541671	MALFUNCTIONED COCKPIT		2/13/98 98ZZZX1507
ARTIFICAL HORIZON PITCH AND ROLL CSAS WILL NOT ENGAGE. REMOVED AND REPLACED.									
2211 RMXA	117NC 7509	BOLKMS BK117C1			88030204	COMPUTER 7004206901	FAILED CSAS		2/6/98 98ZZZX1509
CSAS COMPUTER PITCH LIGHT ILLUMINATED INTERMITTENTLY IN-FLIGHT. REMOVED AND REPLACED.									
2211 RMXA	117NC 7509	BOLKMS BK117C1				COMPUTER 7004206901	FAILED COCKPIT		1/30/98 98ZZZX1513
CSAS COMPUTER INTERMITTENT. ROLL AND PITCH CHANNELS BOTH DROP OFF-LINE AND CANNOT BE RESET OR JUST WILL NOT COME ON-LINE. REMOVED AND REPLACED.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS (cont'd)

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2210 HX1R	118ET 17280019	CESSNA 172R				AUTOPILOT KAP140	MALFUNCTIONED COCKPIT	262	2/19/98 98ZZZX1477
DURING FLIGHT, AUTOPILOT (WHICH WAS OFF) TURNED ITSELF ON AND COULD NOT BE TURNED OFF WITH THE ON/OFF BUTTON. THE INDICATOR LIGHTS BEGAN TO FLASH RANDOMLY. AFTER SEVERAL MINUTES, THE UNIT SHUT ITSELF OFF. ACFT LANDED WITHOUT INCIDENT. THE AUTOPILOT BOX WAS REMOVED AND RETURNED TO MANUFACTURER. IT WAS NOTED THE AUTOPILOT CIRCUIT BREAKER WAS NOT THE PULL OFF TYPE. THE ONLY WAY THE POWER TO THE AUTOPILOT COULD HAVE BEEN TURNED OFF WOULD HAVE BEEN TO TURN OFF THE AVIONIC MASTER; THUS, LOSING ALL NAVIGATION AND COMMUNICATION CAPABILITIES. FURTHER INVEST, REVEALED THE AUTOPILOT MFG CLEARLY CALLED OUT IN ITS INSTALL MANUAL, THE SYMBOL FOR A PULL OFF TYPE CB. THIS INSTALLATION PERFORMED BY THE AIRFRAME MFG.									
3160 R7MA	901CF 90000012	DOUG MD900				DISPLAY 900A3720002107	FAILED COCKPIT	344	3/10/98 98ZZZX1502
DISPLAY SYSTEM UNIT INOPERATIVE. LOWER HALF OF DISPLAY IS DIMMER (APPROXIMATELY BY HALF) THAN THE UPPER HALF. REPLACED WITH REPAIRED UNIT. CORRECTED PROBLEM.									
2210 HEEA	1547D 760077	SKRSKY S76A				MAGNETIC BRAKE 7690001812102	FAILED AUTOFLIGHT		4/2/98 HEEA0013749
LATERAL FORCE TRIM INOPERATIVE.									
2562 HEEA	1547D 760077	SKRSKY S76A		NARCO		ELT ELT910	MALFUNCTION COCKPIT		4/2/98 HEEA0013740
ELT TRANSMITS INTERMITTENTLY WHEN OFF ON ARM.									
3120 HEEA	4253S 760035	SKRSKY S76A				DIGITAL CLOCK 811B	FAILED COCKPIT		4/3/98 HEEA0013839
CLOCK WILL NOT KEEP CORRECT TIME.									
3414 HEEA	1546G 760076	SKRSKY S76A				AIRSPEED IND 8502CS20LW	CRACKED COCKPIT		4/2/98 HEEA0013746
AIRSPEED INDICATOR INLET POTS CRACKED.									
3416 HEEA	5426U 760167	SKRSKY S76A				INDICATOR 212070238007	LEAKAGE COCKPIT		4/3/98 HEEA0013844
ALTIMETER EXCESSIVE CASE LEAKAGE.									
3416 HEEA	5426U 760167	SKRSKY S76A				INDICATOR 212070238003	FAILED COCKPIT		4/3/98 HEEA0013846
INDICATOR IS OUT OF TOLERANCE AT 18,000 FEET. FAILED BEFORE AND AFTER TEST.									
3421 HEEA	22342 760096	SKRSKY S76A				GYRO 501145301	FAILED COCKPIT		4/2/98 HEEA0013705
VERT GYRO WILL NOT SPOOL UP.									
3421 HEEA	5426U 760167	SKRSKY S76A				VERTICAL GYRO 7660002113103	MALFUNCTION NR 1 PITCH		4/2/98 HEEA0013772
NR 1 PITCH KICKS IN LEVEL FLIGHT.									
3421 HEEA	911MJ 760231	SKRSKY S76A				VERTICAL GYRO 7660002113103	FAILED COCKPIT		4/2/98 HEEA0013745
STARTED TUMBLING IN FLIGHT.									

***** DENOTES SIGNIFICANT OCCURRENCE

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS (cont'd)

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3423 HEEA	31217 760229	SKRSKY S76A				COMPASS CB212528A	DEFECTIVE COCKPIT		4/2/98 HEEA0013683
COMPASS FLUID LEVEL IS LOW.									
3444 HEEA	1546G 760076	SKRSKY S76A				TRANSCIVER 7001840913	FAILED RADAR ALT		4/2/98 HEEA0013742
FAILED TEST 1.1 (NOT VALID)									
3452 HEEA	22342 760096	SKRSKY S76A				TRANSPONDER 066107100	FAILED COCKPIT		4/2/98 HEEA0013710
TRANSPONDER INOPERATIVE ALSO CAPACITY C507 IS BAD.									
(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS)									

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS

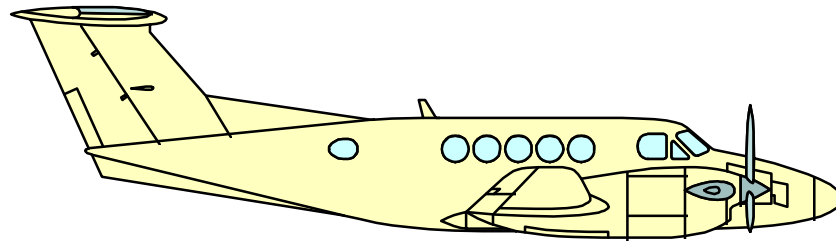
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6111	9244B	AMTRWG		SNSNCH		BLADE	SEPARATED		3/23/98
	2	WAGARO		76EM8S5			PROPELLER		98ZZZX1487
APPROXIMATELY 40 INCHES OF PROPELLER SEPARATED. DEFINITE 'SHADOW' OF DIFFERENT COLOR IN METAL IN CROSS-SECTION OF CHORD. 'SHADOW' OCCUPIED ONE-THIRD OF CROSS-SECTION. NO APPARENT CAUSE FOR FACTURE.									

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS)



INTERNATIONAL SERVICE DIFFICULTY REPORT



INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT

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2720		AIRTRC AT502				SPRING 701031	BROKEN RUDDER CONTROL	3/18/98	AU980320
(AUS) LT RUDDER/AILERON INTERCONNECT SPRING BROKEN. THE SPRING FAILED ON THE HOOK APPROXIMATELY 10MM (0.393 INCH) FROM THE ATTACHMENT POINT. INVESTIGATION FOUND THAT THE CRACK HAD BEEN PRESENT FOR SOME TIME BEFORE FAILURE.									
3243		AIRTRC AT802				CLEVIS 400021	FAILED LT BRAKE CYL	3/12/98	AU980276
(AUS) LT BRAKE MASTER CYLINDER CLEVIS BOLT FAILED.									
5711		AYRES S2RT15NORMAL				PLATE	CRACKED WING SPAR STRUCT	3/4/98	AU980252
(AUS) WING SPAR TOP PLATE CRACKED.									
3260		BEECH A100				SWITCH 1CH25	FAILED DOWN LOCK	2/20/97	CA970226062
(CAN) ON DESCENT, NOSE GEAR DID NOT INDICATE GREEN. GEAR SWUNG THREE OR FOUR TIMES, NO GO. FLY-BY CONFIRMED GEAR DOWN. AIRCRAFT LANDED OK. NOSE DOWN LOCK SWITCH REPLACED AS NO PROBLEM COULD BE FOUND, AND SWITCH HAD BEEN A PROBLEM A FEW DAYS EARLIER.									
3260		BEECH A100				SWITCH 1CH25	OUT OF ADJUST NLG	2/17/97	CA970226059
(CAN) WHEN GEAR SELECTED DOWN, NOSE GEAR DID NOT SHOW GREEN. EMERGENCY PROCEDURES GOT GREEN. AIRCRAFT LANDED OK. FOUND NOSE GEAR SWITCH REQUIRED ADJUSTMENT.									
5312		BEECH 100BEECH				BULKHEAD 9774400191	CORRODED AFT PRESS	10608	11/24/97 CA971219015
(CAN) WHEN GLUED ON INSULATION WAS REMOVED AT REAR SIDE OF AFT PRESSURE BULKHEAD BELOW OUTFLOW VALVES, CORROSION WAS FOUND. SUSPECT MOISTURE TRAPPED BENEATH INSULATION. AIRCRAFT TT: 10,593 HOURS.									
5610		BEECH A100				WINDSHIELD 9031001P	CRACKED PILOT	2826	2/19/97 CA970226061
(CAN) WINDSHIELD CRACKED DURING CRUISE. PART TT: 17,086 HOURS.									
5740		BEECH B100				WING BOLT 8178414	CRACKED SHANK	24	12/24/97 CA980113007
(CAN) WHILE PERFORMING AD CF-81-25R5, A CRACK WAS DETECTED. THE RIGHT HAND LOWER FORWARD BOLT WAS FOUND CRACKED AT THE SHANK.									
2121		BEECH 200BEECH			10138444761	BLOWER FAN 10138444761	FAILED INTERNAL	3102	4/28/97 CA970508012
(CAN) FLIGHT CREW REPORTED INADEQUATE AIRFLOW IN COCKPIT AREA. AIR CONDITIONER THEN SHUT DOWN DUE TO LACK OF AIRFLOW OVER THE EVAPORATOR COIL. MAINTENANCE FOUND THE BRUSHES OF THE BLOWER FAN WORN EXCESSIVELY.									
2435		BEECH 200BEECH				STARTER/GEN 23048016	FAILED RT ENG	3/9/98	AU980236
(AUS) RT STARTER/GENERATOR FAILED.									
2460		BEECH B200C				PANEL	SHORTED DC POWER DISTRIB	1/20/98	AU980285
(AUS) CIRCUIT BREAKER (CB) PANEL BUS FEEDER SHORT CIRCUITING TO AIRFRAME ADJACENT TO CBS. SHORT CIRCUIT OCCURRED DUE TO WATER LEAKAGE FROM WINDOW.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT (cont'd)

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2612		BEECH 200BEECH				FIRE DETECTOR	FAULTY FIRE DETECTION		2/19/98 AU980284
(AUS) LT ENGINE FIRE DETECTION SYSTEM FAULTY. INVESTIGATION COULD FIND NO FAULTS WITH THE SYSTEM. SUSPECT MOISTURE CONTAMINATION OF DETECTORS. LT ENGINE SHUT DOWN AND FIRE BOTTLE OPERATED.									
2612		BEECH B200C				DETECTOR	CONTAMINATED FIRE DETECTION		2/15/98 AU980246
(AUS) LT ENGINE FIRE DETECTORS CONTAMINATED WITH MOISTURE. FALSE FIRE WARNING RESULTED IN ENGINE SHUTDOWN AND FIRE BOTTLE DISCHARGE.									
2730		BEECH 200BEECH				TORQUE TUBE 1016100196	CORRODED RT ELEV		2/13/98 AU980251
(AUS) RT ELEVATOR TORQUE TUBE CONTAINED CORROSION AND DEEP PITTING IN THE AREA ADJACENT TO THE RIB ATTACHMENT BRACKET.									
2752		BEECH 200BEECH				ACTUATOR 101521016	INCORRECT ASSY TE FLAP		1/30/98 AU980226
(AUS) RT INBOARD FLAP ACTUATOR INCORRECTLY ASSEMBLED WITH THE INTERNAL WORKINGS FROM AN OUTBOARD ACTUATOR WHICH ARE APPROXIMATELY 50.8MM (2 INCHES) SHORTER. THE ACTUATOR WAS BEING INSTALLED FOR THE FIRST TIME FOLLOWING RECEIPT FROM OVERHAUL IN THE USA. PERSONNEL/MAINTENANCE ERROR.									
2915		BEECH 200BEECH	PWA PT6A41		MS28893C6	VALVE MS28893C6	FAILED HYD PRESS RELIEF	3115	1/31/97 CA970523002
(CAN) HYDRAULIC PUMP WAS OBSERVED TO BE RUNNING CONTINUOUSLY WHILE TAXIING. HYRAULIC PUMP BREAKER PULLED AND THE AIRCRAFT RETURNED TO THE HANGAR AND PUT ON JACKS. HYDRAULIC RELIEF VALVE WAS FOUND TO GO INTO BYPASS AT LESS THAN 1200 PSI, RATING SHOULD ALLOW FOR 2250 PSI. NEW VALVE INSTALLED.									
3230		BEECH 200BEECH			1153800025	MOTOR 1153800025	WORN GEAR	3815	4/28/97 CA970508013
(CAN) MAINTENANCE FOUND THE MOTOR TO BE LABORING WHILE TRYING TO BUILD UP PRESSURE. FOUND THE BRUSHES TO BE WORN.									
3230		BEECH 200BEECH		ITT 1225P363		PRESSURE SWITCH 1225P363	FAILED NLG	1618	1/9/97 CA970523001
(CAN) NOSE GEAR DOWNLOCK BROKE WHEN UNDERCARRIAGE SELECTED UP. MAINTENANCE LATER TRACED THE FAULT TO A FAULTY PRESSURE SWITCH DURING GEAR CYCLING ON JACKS.									
3233		BEECH 200BEECH	PWA PT6A41		ADI79990033	PISTON ROD ADI79990035	LEAKING MLG ACTUATOR	3967	3/31/98 CA971104007
(CAN) MAIN LANDING GEAR ACTUATOR LEAKING FLUID BETWEEN PISTON ROD AND ACTUATOR HOUSING. DISASSEMBLY OF THE ACTUATOR REVEALED CORROSION ON ROD AFFECTED THE "O" RING CAUSING THE HYDRAULIC LEAK. NEW ACTUATOR INSTALLED.									
3234		BEECH 200BEECH	PWA PT6A41			SELECTOR VALVE 25400	FAILED MLG	84	3/11/97 CA970523004
(CAN) GEAR WOULD NOT DROP WHEN SELECTED. GEAR DROPPED WITH EMERGENCY PROCEDURE. WITH AIRCRAFT ON JACKS, THE GEAR WOULD CYCLE UP, BUT HYDRAULIC PRESSURE HAD TO BE RELEASED MANUALLY TO GET THE GEAR TO DROP. POWER WAS FOUND GOING INTO THE VALVE BUT WAS NOT SHIFTING TO THE DOWN PORTS. VALVE REPLACED.									
3260		BEECH 200BEECH				SWITCH 1003810061	FAILED RT MLG UPLOCK	6536	5/21/97 CA970527006
(CAN) PILOTS REPORTED THE LANDING GEAR HANDLE LIGHTS REMAIN ON IN THE UP POSITION. INVESTIGATION FOUND A DEFECTIVE RIGHT LANDING GEAR UPLOCK SWITCH. A CONTINUITY CHECK FOUND HIGH RESISTANCE. SWITCH REPLACED.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT (cont'd)

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3260		BEECH 200BEECH			44EN496	SQUAT SWITCH 44EN496	INTERMITTENT RT MLG	6192	1/30/97 CA970508011
(CAN) CREW OBSERVED THE ANTI-RETRACTION HOOK ON THE GEAR HANDLE WOULD NOT RETRACT AFTER TAKEOFF. INSPECTION FOUND THE RIGHT HAND SQUAT SWITCH INTERMITTENT. SWITCH REPLACED.									
3320		BEECH 200BEECH				POWER SUPPLY PWFLC28	SHORTED PASSENGER COMPT		3/4/98 AU980245
(AUS) FLUORESCENT LIGHTING POWER SUPPLY SHORT CIRCUITED.									
5730		BEECH B200C				SKIN	DEBONDED LT WING		2/25/98 AU980248
(AUS) LT WING CENTER SECTION LOWER SKIN DEBONDED.									
5743		BEECH B200C				WEB 1011201101	CORRODED LT MLG BRACE		2/17/98 AU980247
(AUS) LT LANDING GEAR DRAG BRACE OUTBOARD ATTACHMENT WEB CORRODED.									
5510		BEECH A23				BOLT AN447	DAMAGE STAB ACT TUBE	2033	9/20/97 CA971020006
(CAN) UPON REMOVAL OF STABILATOR ACTUATING TUBE BALANCE WEIGHT, IMPACT DAMAGE TO THE ATTACHMENT BOLT WAS FOUND. DAMAGE APPEARED TO BE CAUSED BY REPETITIVE IMPACT RESULTING FROM BALANCE WEIGHT STRIKING THE MICARTA STOP BLOCK. AIRCRAFT TT: 2,033 HOURS.									
3340		BEECH F33A				SWITCH 3538013243	BROKEN LANDING LIGHT	3482	11/14/97 CA971219023
(CAN) SLIGHT ELECTRICAL BURNING SMELL NOTED IN COCKPIT BY PILOTS. LANDING LIGHT CIRCUIT BREAKER SWITCH FOUND FUSED IN THE ON POSITION AND VERY WARM TO TOUCH. TOGGLE COULD BE MOVED WITH NO RESISTANCE. AIRCRAFT USED IN TRAINING AND HIGH USAGE MAY BE CAUSE OF DIFFICULTY.									
2810		BEECH D55				FUEL CELL 21219	DETERIORATED FUEL STORAGE		2/23/98 AU980238
(AUS) LT FUEL CELL DETERIORATED. DRAIN FITTING TORN. INTERNAL BAFFLE LOOSE.									
3230		BEECH D55				RELAY 6046H39A	FAULTY GEAR RETRACT		3/11/98 1650 AU980304
(AUS) LANDING GEAR RELAY FAULTY. SUSPECT CAUSED BY INGRESS OF FOREIGN MATTER.									
5511		BEECH 58				DOUBLER	CRACKED HORIZ STABILIZER		3/4/98 AU980300
(AUS) LT TAILPLANE INBOARD RIB/REAR SPAR JOINT DOUBLER CRACKED.									
5521		BEECH 58		MCAULY		SPAR	CRACKED ELEVATOR		3/4/98 AU980299
(AUS) ELEVATOR SPAR CRACKED ACROSS SPAR WEB IN AREA OF OUTBOARD HINGE ATTACHMENT. CRACK ORIGINATED AT THE HINGE ATTACHMENT BOLT HOLE AND PROPAGATED IN BOTH DIRECTIONS. FACTORY FITTED DOUBLER ALSO CRACKED.									
3233		BEECH 76			76	ACTUATOR 1053840023	BROKEN LT MLG		3/23/98 AU980330
(AUS) LT MAIN LANDING GEAR ACTUATOR ROD BROKEN AT THE END OF THE THREADED SECTION.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT (cont'd)

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2520		BEECH 65A90			BEECH 5053448627	RIVNUT NAS1329C4K80	LOOSE SEAT FRAME		3/26/98 CA971024004
(CAN) DURING ROUTINE INSPECTION AND IN A CCW CAMPAIGN NOTICE 651-006, INSPECTION OF CABIN SEAT FOUND LOOSE RIVNUTS. SEAT REPAIRED.									
3246		BEECH C90	PWA PT6A20A			WHEEL HALF 50300010105	CRACKED LT MLG		4/10/97 CA970430003
(CAN) HALF OF THE WHEEL ASSY OF THE LEFT HAND MAIN LANDING GEAR WHEEL BROKE DURING TAKEOFF. A TUBE IN THE TUBELESS TIRE PREVENTED AIR FROM ESCAPING THROUGH THE CRACK THAT HAD DEVELOPED. AIRCRAFT WAS IMPORTED AND THE SUBMITTER SPECULATES THE PREVIOUS OWNER CHANGED THE WHEELS AND TIRES.									
3340		BEECH 65A90	PWA PT6A20			CONNECTORS 32448	BURNT LT LANDING LIGHT		11/6/97 CA971117004
(CAN) IN COMPLYING WITH AIRCRAFT SERVICES MEMO EWS 97-04, FOUND ONE OVERHEATED KNIFE CONNECTOR. AFFECTED AREA REPLACED WITH RELEASABLE WIRE SPLICE.									
3340		BEECH 65A90	PWA PT6A20			WIRE SPLICE	BURNT LANDING LIGHT		10/27/97 CA971028011
(CAN) ELECTRICAL WIRING REAR OF LT AND RT WING LANDING LIGHTS FOUND BURNT DUE TO OVERHEATED SPLICE. KNIFE CONNECTORS WERE FOUND INSTALLED. THESE WERE REPLACED BY RAYCHEM ENVIROMENTAL PERMANENT SPLICE. FLEET WIDE INSPECTION TO BE CARRIED OUT.									
7602		BEECH 95B55	CONT IO470L			CABLE 5038901021	SEPARATED MIXTURE	13	11/18/97 CA971216043
(CAN) PILOT REPORTED LOSS OF MIXTURE CONTROL ON THE RIGHT ENGINE. INSPECTION FOUND THE MIXTURE CABLE HAD FAILED AT THE SWAGE OF THE ENGINE END OF THE CABLE. THIS IS THE THIRD FAILED CABLE ON THIS AIRCRAFT IN 85 HOURS OF OPERATION. CABLES FORWARDED TO MANUFACTURER FOR EVALUATION.									
2740		BEECH 99				RELAY 6041H220	FAILED STAB MAIN TRIM		2/19/97 CA970226060
(CAN) MAIN TRIM NOT FUNCTIONING. AIRCRAFT LANDED OK. FOUND MAIN TRIM RELAY HAD FAILED.									
5720		BEECH 99				FITTING 501200743	CRACKED UPPER INBOARD	30227	2/15/97 CA970227005
(CAN) DURING REPAIR FOR WING BOLT COVER, VISUAL INDICATION SHOWED A SCRATCH. FURTHER INSPECTION FOUND A CRACK EXTENDING FROM THE BOLT HOLE COUNTER BORE. AIRCRAFT TT: 30,367 HOURS.									
2750		BNORM BN2A21				SWITCH 8834K5	BROKEN TE FLAP CONTROL		3/2/98 AU980243
(AUS) FLAP ACTUATION SWITCH BROKE APART DURING ACTUATION.									
2750		CESSNA 152				COUPLING C3010010211	DAMAGE FLAP	11523	11/10/97 CA971117010
(CAN) DURING CHECK, FOUND THAT ALTHOUGH FLAP MOTOR WAS TURNING NORMALLY, FLAPS DID NOT APPEAR TO BE RESPONDING QUICKLY. INVESTIGATION REVEALED DEFECTIVE SPLINE COUPLING ON FLAP MOTOR SHAFT.									
5711		CESSNA A152			A152	PLATE 042240714	CORRODED WING SPAR		3/17/98 AU980332
(AUS) WING SPAR PLATE CONTAINED EXFOLIATION CORROSION BETWEEN SPAR FLANGE AND SPAR PLATE. LENGTH OF CORROSION 35MM (1.37 INCH).									
3230		CESSNA 172RG				PIVOT 24411009	CRACKED RT MLG		3/5/98 AU980239
(AUS) RT MAIN LANDING GEAR PIVOT CRACKED.									

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3233		CESSNA 172RG				HOUSING 9882015	CRACKED MLG ACTUATOR		3/5/98 AU980240
(AUS) MAIN LANDING GEAR ACTUATOR HOUSING CRACKED.									
5312		CESSNA 172P		MCAULY	05121872	BULKHEAD 05121871	CRACKED DOOR POSTS		2/9/98 AU980301
(AUS) FUSELAGE AFT DOOR POSTS P/N 0512187-1 (LT) AND P/N 0512187-2 (RT) CRACKED. FOUND DURING INSPECTION IAW CESSNA SB SEB 97-1.									
5312		CESSNA 172P			05121872	BULKHEAD 05121871	CRACKED DOOR POSTS		2/6/98 AU980302
(AUS) FUSELAGE LOWER AFT DOOR POST BULKHEADS P/N 0512187-1 AND P/N 0512187-2 CRACKED. FOUND DURING INSPECTION IAW CESSNA SB SEB97-1.									
5712		CESSNA A188B			162100917	RIB ASSEMBLY 162100917	CRACKED WS20.62	1638	9/3/97 CA970915006
(CAN) WHILE PERFORMING A 100-HR INSPECTION, THE AME FOUND A CRACK AT THE WING RIB AT STATION 20.62. THE CRACK IS APPROXIMATELY .75 INCH LONG STARTING FROM THE LIGHTENING HOLE WHICH IS LOCATED 11 INCHES FORWARD OF THE REAR WING ATTACHMENT. AIRCRAFT TT: 1,558 HOURS.									
5712		CESSNA A188B				RIB ASSEMBLY 16214018	CRACKED BS 36.12	1887	9/4/97 CA970915005
(CAN) WHILE CARRYING OUT A 100-HR INSPECTION, THE AME FOUND CRACKS AT THE WING RIBS AT STATION 22.87 AND STATION 36.12. THREE CRACKS WERE FOUND IN THE SECOND AND THIRD LIGHTENING HOLES IN P/N 1621401-8 AND THREE CRACKS WERE FOUND IN THE FIRST, SECOND AND THIRD LIGHTENING HOLES. AIRCRAFT TT: 1,809 HOURS.									
3246		CESSNA TU206G			WIPAIR 3730	DRAW LINK 3A0505901	STIFF MLG		2/18/97 CA970227003
(CAN) GEAR WOULD NOT LOCK DOWN, FOUND MAIN DRAW LINK CENTER JOINT STIFF. BOLT REMOVED AND HOLE CLEANED. LUBED AREA AND REASSEMBLED. WIPAIRE RECOMMENDED DISASSEMBLING AND CLEANING EVERY THREE YEARS.									
5320		CESSNA U206C			CESSNA U206	DOOR POST 121340615	CRACKED WINDSHIELD	3964	10/16/97 CA971024013
(CAN) IT WAS OBSERVED ON ONE OCCASSION THE WINDSHIELD APPEARED TO BE MOVING IN ITS LOWER RETAINER DURING WATER LANDINGS. MAINTENANCE ACTION INVOLVED REMOVING LOWER RETAINER REVEALING FORWARD DOOR POSTCHANNEL WAS CRACKED THREE INCHES. AT CRACK LOCATION, THERE IS AN .1250 INCH PRODUCTION GAP BETWEEN LOWER SKIN P/N 1213600-25 AND VERTICAL OUTER RETAINER P/N 0713611-3. RIGIDITY OF UPPER CABIN BOX IS LOST. IT IS FELT THIS CONDITION COULD LEAD TO MORE SERIOUS PROBLEMS. SUSPECT CAUSE DUE TO HEAVY LANDINGS AND HIGH FREQUENCY CYCLES.									
3244		CESSNA 210N			CLEVELAND 4075B	TIRE 600X6	DAMAGED LT MLG		3/24/98 AU980323
(AUS) LT MAIN LANDING GEAR TIRE CUT DURING LANDING ON ROUGH STRIP. TIRE DEFLATED.									
5312		CESSNA 210J			12124023	DOUBLER 12120031	BROKEN BS 209	2545	9/18/97 CA971003010
(CAN) DURING ANNUAL INSPECTION, A CRACK AT A RIVET HOLE WAS FOUND IN THE ABOVE DOUBLER. AFTER REMOVING THE DOUBLER IT WAS FOUND TO BE CRACKED INTO TWO PIECES. THE BULKHEAD ASSEMBLY WAS FOUND TO HAVE A .50 INCH CRACK RUNNING FROM EACH SIDE OF THE RIVET HOLE. THE BULKHEAD IS LOCATED AT STATION 209.0 AND IS THE ATTACHMENT POINT FOR THE HORIZONTAL STABILIZER.									
5312		CESSNA 210M				BULKHEAD 12113256	CRACKED FUSELAGE		3/20/98 AU980322
(AUS) FUSELAGE LOWER CENTER SECTION FRAME/BULKHEAD CRACKED. THE MAIN CRACKING WAS FROM THE OUTBOARD CUTOUT FOR THE RT MAIN LANDING GEAR LEG. CRACKING WAS ALSO COMMENCING ON THE OPPOSITE CUTOUT AND ALSO ON THE OUTER EDGE WHERE THE OUTBOARD CASTING BOLTS TO THE FRAMES.									

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2460		CESSNA 402C				MASTER SWITCH CM358950	BURNT OUT DC POWER DISTRIB		3/14/98 AU980277
(AUS) AVIONICS MASTER SWITCH BURNED OUT. SUSPECT CAUSED BY WATER INGRESS VIA THE WINDOW SEAL.									
2750		CESSNA 402C				CABLE ASSY 500000863	BROKEN WIRES FLAP	13636	10/29/97 CA971104004
(CAN) DURING THE ROUTINE INSPECTION, BROKEN WIRES/STRANDS OF THE FLAP CONTROL CABLE ASSY WERE FOUND. DEFECTIVE CABLE ASSY AND PULLEY P/N S378-4 REPLACED AND SYSTEM CHECKED.									
3220		CESSNA 402C				FORK TUBE ASSY 58420005	BROKEN RT LWR AXLE	4204	5/15/97 CA970527010
(CAN) AME NOTICED THE RIGHT HAND LOWER AXLE ATTACH POINT WAS BROKEN. DAMAGE APPEARS TO HAVE BEEN CAUSED BY A BEARING SEIZURE.									
3234		CESSNA 402C				VALVE 99102251	FAULTY LANDING GEAR SEL		3/14/98 AU980279
(AUS) LANDING GEAR SELECTION VALVE FAULTY DUE TO HIGH RESISTANCE IN ELECTRICAL SOLENOID COIL. CAUSED BY INGRESS OF HYDRAULIC FLUID.									
5320		CESSNA 404CESSNA			C404	WEB 52130409	CRACKED NLG SUPPORT		2/23/98 AU980221
(AUS) NOSE LANDING GEAR SUPPORT WEBS P/N 5213040-9 (LT) AND P/N 5213040-10 (RT) CRACKED.									
2820		CESSNA 414A				FUEL LINE 560010939	CHAFED SPAR WEB	3336	5/9/96 CA960513015
(CAN) FUEL LINE CHAFED ON EDGE OF THE HOLE WHERE IT PASSES THROUGH THE MAIN WING SPAR LT SIDE. LINE INSPECTED AND FOUND WITHIN CHAFE LIMITS OF CESSNA SB MEB 87-7. LINE REPOSITIONED TO PROVIDE CLEARANCE. MANUFACTURER INSTALLED SPIRAL CHAFE STRIP TO PROVIDE PROTECTION. EXAMINATION OF RT SIDE DID NOT INDICATE CHAFING, HOWEVER, LINE WAS VERY CLOSE IN PROXIMITY TO EDGE OF HOLE (.015 INCH). MANY FUEL LINES PASS THROUGH THE WING SPAR IN THIS AREA LEFT AND RIGHT AND ALL HAVE THE POTENTIAL TO CHAFE.									
2913		CESSNA 414A				HYDRAULIC PUMP 99101372	LOW FLOW R/H ENGINE		1/14/96 CA960515007
(CAN) AIRCRAFT PARKED OUTSIDE, TEMP -25 DEGREES CELSIUS. AIRCRAFT PRE-HEATED AND PREPARED FOR FLIGHT. ON TAKEOFF, AT POINT OF LIFT-OFF, RT SIDE HYDRAULIC FLOW LIGHT ILLUMINATED. PILOT CONTINUED WITH TAKEOFF AND ATTEMPTED TO RETRACT THE UNDERCARRIAGE. FIRST ATTEMPT FAILED BUT THE SECOND WAS SUCCESSFUL. ACFT RETURNED TO BASE AND LANDED SAFELY. MAINTENANCE JACKED AIRCRAFT AND CHECKED THE GEAR. NO FAULTS FOUND AND AIRCRAFT RETURNED TO SERVICE. SUBMITTER STATES THIS HAS HAPPENED ON OTHER 400 SERIES ACFT WITHOUT DETERMINING A CAUSE.									
3310		CESSNA 414A	CONT TSIO520N		GRIMES A350CNIWBKSH	CONNECTOR A350CNIWBKSH	BURNT INST PANEL LITE		3/13/98 AU980310
(AUS) SPARE POST LIGHT CONNECTOR LOCATED BEHIND THE INSTRUMENT PANEL SHORT CIRCUITED AND BURNT.									
3213		CESSNA 421B				TRUNNION	CRACKED LT MLG		3/26/98 AU980314
(AUS) LT MAIN LANDING GEAR TRUNNION FORWARD MOUNTING SUPPORT CRACKED. RT MAIN LANDING GEAR TRUNNION SHOWS SIGNS OF A SIMILAR DEFECT.									
3213		CESSNA 421C				BOLT AN17520	MISSING LT TORQUE LINK		4/23/96 CA960513027
(CAN) ON LANDING, LT TORQUE LINK CENTER BOLT (AN 175-20) BUSHING (5041013) AND WASHERS (AN 960-7L) AND WASHERS (5045018-2) DEPARTED FROM AIRCRAFT CAUSING WHEEL TO CAMBER TO A CROSSWISE CONDITION AFFECTING LANDING ROLLOUT. DYE PENETRANT INSPECTION CARRIED OUT ON GEAR, BUT NO FAULTS FOUND. WHEEL ASSEMBLY REPLACED. IT COULD NOT BE DETERMINED WHETHER OR NOT THE BOLT SHEARED OR COTTER PIN SHEARED.									

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3310		CESSNA 421C	CONT GTSIO520L			DIMMER ASSY 51184241	MISSING PARTS	7/15/96	CA960808004
(CAN) A NEW DIMMER ASSY FROM FACTORY WAS INSTALLED. NEXT FLIGHT, THE GEAR LIGHTS DID NOT ILLUMINATE WHEN GEAR SELECTED DOWN. EMERGENCY LANDING CARRIED OUT SAFELY. UPON INSPECTION, IT WAS DISCOVERED THAT THE DIMMER WAS MISSING TWO WIRES. ANOTHER NEW UNIT WAS INSTALLED AND CHECKED OK. AIRCRAFT RETURNED TO SERVICE.									
3246		CESSNA 441				WHEEL HALF 16294	CRACKED COUNTER BORE	7/8/96	CA960717001
(CAN) OUTBOARD WHEEL HALF CRACKED FROM BASE OF BOLT HOLE COUNTER BORE TO INSIDE OF WHEEL HALF ABOVE O-RING AIR SEAL. CRACK ALLOWED TUBELESS TIRE TO SLOWLY DEFLATE.									
3246		CESSNA 441			CLEVELAND 40169	WHEEL 40169	CRACKED OUTBD	330	3/19/98 CA970605003
(CAN) OUTBOARD WHEEL HAS A .500 INCH CRACK RUNNING FROM BASE OF BOLT HOLE COUNTER BORE TO INSIDE OF WHEEL .500 INCH ABOVE O-RING AIR SEAL. CRACK ALLOWED TUBELESS TIRE TO SLOWLY DEFLATE. REPLACED.									
7410		CESSNA 441	GARRTT TPE33110			IGNITION BOX 103784005	FAILED ENGINE	7/11/97	CA971223002
(CAN) IGNITION BOX FAILED.									
7700		CESSNA 441	GARRTT TPE33110			TRANSDUCER 99103261	FAILED ENGINE	10/7/97	CA971222003
(CAN) TRANSDUCER GAVE INCORRECT SIGNAL TO ENGINE COMPUTER-CAUSING SRL TO BE INCORRECT. THE ERROR WAS GREATER AS THE AIRCRAFT CLIMBED. THUS; TORQUE, FUEL FLOW, AND EGT DID NOT MATCH THE OTHER ENGINE AS THE AIRCRAFT CLIMBED. THIS IS THE P/P TRANSDUCER.									
2750		CESSNA 500CESSNA				CABLE ASSY 556515010CR	FRAYED FLAP	7/17/96	CA960808005
(CAN) NEW CABLE RECEIVED FROM MANUFACTURER TO BE INSTALLED AS PER PHASE 5 INSPECTION. PRE-INSTALLATION CHECK FOUND WIRES BROKEN ALONG THE LENGTH OF THE CABLE EVERY 1.5 TO 2 INCHES. THIS IS THE THIRD CABLE RECEIVED FROM THE MANUFACTURER IN THIS CONDITION THIS MONTH.									
5210		CESSNA 550				DOOR SEAL 99120754	FAILED CABIN	2255	8/28/96 CA960909031
(CAN) AT FL 350, ONE HOUR INTO FLIGHT, DOOR SEAL BLEW. CABIN ALTITUDE CLIMBED RAPIDLY TO 18,000 FEET. REPLACED CABIN DOOR SEAL DUE TO SUSPECTED MOISTURE AND FREEZING, THEREFORE, BLOCKING THE SUPPLY OF AIR TO KEEP THE DOOR SEAL INFLATED. ENTIRE SEAL INFLATION PLUMBING PURGED OF MOISTURE. PART TC: 2,691. AIRCRAFT TT: 2,848.									
5312		CESSNA 550				BULKHEAD 651201021	MISINSTALLED BS 345	2234	10/3/97 CA971010003
(CAN) ON INSPECTION, FOUND THAT THE FIRST 12 INCHES AFT OF THE REAR PRESSURE BULKHEAD (STN 345.0) TO THE RIGHT OF CENTERLINE AT THE UPPER CENTER STRINGER, RIVETS WERE INSTALLED WITH INSUFFICIENT EDGE DISTANCE. AIRCRAFT TT: 2,277 HOURS.									
5320		CESSNA 550				SPLICE 551117239	MISMANUFACTURED LT WINDSCREEN	2233	9/26/97 CA970930008
(CAN) SPLICE DOUBLER AT THE INSIDE LOWER AFT CORNER OF THE LEFT WINDSCREEN FOUND WITH .083 INCH EDGE DISTANCE ON TWO RIVETS, THIS IS LESS THAN THE MINIMUM EDGE DISTANCE. ON FORWARD RIVET ABOUT .020 INCH HAS BEEN FILED AWAY. SB 550-53-26 REFERS. AIRCRAFT T: 2,227 HOURS.									
5330		CESSNA 550				SKIN 55120106	CRACKED BS 456.5	2233	10/6/97 CA971010006
(CAN) ON DORSAL FIN REPLACEMENT, A 2 INCH CRACK WAS FOUND IN THE RT UPPER TAILCONE SKIN AT STN 456.5 RUNNING FROM THE UPPER EDGE OF THE SKIN CIRCUMFERENTIALLY TOWARDS THE RIGHT. REPAIRED IAW ASSB 851-0047.									

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5530		CESSNA 550				DOUBLER 651105014	DAMAGED BS 345	2234	10/3/97 CA971010004
(CAN) DURING MANUFACTURING AND INSTALLATION OF THE DORSAL FIN, A RIVET AT THE REAR PRESSURE BULKHEAD (STN 345.0) WAS DRILLED THROUGH THE SKIN, DOUBLER AND FLANGE ANGLE ADJACENT TO A BULKHEAD ATTACHMENT RIVET. AIRCRAFT TT: 2,277 HOURS.									
5751		CESSNA 550			552400078	AILERON 552400052	CRACKED LEADING EDGE	2233	10/6/97 CA971010007
(CAN) RIGHT AILERON LEADING EDGE SKIN CRACKED IN TWO PLACES UNDER INBD BALANCE WEIGHT. SCREW HEADS ABOUT 1 INCH LONG EACH. LEADING EDGE REPLACED. PART TC: 2,277 HOURS.									
5730		CESSNA 525				SKIN 632205313	MISSING WING	920	9/9/97 CA970918009
(CAN) PILOT REPORTED 3 INCH BY 4 INCH SEGMENT OF LOWER WING SKIN MISSING. REPLACED. AIRCRAFT TT: 794 HOURS.									
5522		DHAV DHC3			C3TEI106	STIFFENER	CRACKED RT ELEV TE	13942	12/2/97 CA971216049
(CAN) TRAILING EDGE OF ELEVATOR SKIN FOUND SEPARATED. CLOSER EXAMINATION FOUND STIFFENER CRACKED AT RIVET HOLES AND BROKEN THROUGH IN 3 PLACES. INTERGRANULAR CORROSION FOUND ON STIFFENER. SKIN OK. AIRCRAFT TT: 13,469.									
2410		DIAMON DA20A1				ARM 953240	CHAFED ALTERNATOR		4/25/97 CA970513017
(CAN) LOCKWIRE FOUND TO HAVE CHAFED THE ALTERNATOR ARM.									
3242		EMB EMB110P1			ERAM 16835	GUIDE 16844	MISSING BRAKE DISC		11/30/97 CA971216044
(CAN) TAXIING TO RAMP, PILOT NOTICED UNVEVEN BRAKING ON ONE SIDE. THE GUIDE, WHICH IS NORMALLY ATTACHED TO THE CIRCUMFERENCE OF THE DISC WAS MISSING AND THE DISC WAS SCORED. SUBMITTER NOTES THAT SOMETIMES THE SCREWS WHICH ATTACH GUIDE TO DISC HAVE BEEN FOUND LOOSE. (150-HOUR INSPECTION) IN SPITE OF VARIED ATTEMPTS TO RECTIFY, NIL LUCK. THE OPERATOR NOTES THAT COOLING OF DISC MAY CONTRIBUTE TO SCREW LOOSENING.									
5320		EMB EMB110P1				CHANNEL 4A14110716	CRACKED STAB SUPPORT		3/5/98 AU980293
(AUS) FUSELAGE LT UPPER HORIZONTAL STABILIZER SUPPORT ATTACHMENT CHANNEL CRACKED THROUGH TWO BOLT HOLES. FURTHER INVESTIGATION FOUND SEVERE FRETTING ON THE LT CHANNEL TO REAR BULKHEAD ATTACHMENT FACE.									
3230		GROB G103TWNASTIR				DRIVER 1035052	BENT GEAR SELECT	135	10/3/97 CA970910003
(CAN) GEAR SELECTED DOWN AND WAS BELIEVED TO BE DOWN AND LOCKED. AT TOUCHDOWN, THE GEAR RETRACTED AND AIRCRAFT SLID ON ITS BELLY TO A STOP. INSPECTION FOUND THE ACTUATING HANDLE IN THE FORWARD COCKPIT BENT. THIS IS SECOND OCCURRENCE FOR THIS AIRCRAFT AND DRIVER TO BE BENT.									
2730		GROB G115C				STOP M6X45	CRACKED ELEV DOWN	130	4/15/97 CA970422034
(CAN) ELEVATOR DOWN RUBBER STOP CRACKED.									
2730		GROB G115C				STOP M6X45	CRACKED ELEV	130	4/19/97 CA970425007
(CAN) RUBBER ELEVATOR STOP CRACKED FROM WEAR MARKS TO EDGE. ALSO, WHEN STOP REMOVED, EXCESSIVE CORROSION FOUND ON STOP. AIRCRAFT TT: 291 HOURS.									
5523		GROB G115C				TRIM TAB	SEPARATED ELEVATOR TAB STR		2/26/98 AU980242
(AUS) ELEVATOR TRIM TAB SEPARATED. HINGE SEGMENTS TORN FROM ELEVATOR. SUSPECT CAUSED BY AIRCRAFT OVERSPEED.									

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2750		GULSTM 695A				CABLE 500012231	BROKEN RT INB FLAP	5330	7/8/97 CA971010012
(CAN) 75 PERCENT OF RT INBOARD FLAP CABLE STRANDS BROKEN. REPLACED.									
5753		GULSTM 690D				RIB 260026103	CRACKED LT INB FLAP TE	9794	11/5/97 CA971117012
(CAN) LEFT WING INBOARD FLAP TRAILING EDGE RIB CRACKED. AIRCRAFT TT: 9,794 HOURS.									
5753		HELIO H250		HELIO		FLAP TRACK 3910104142	BROKEN LT INBOARD	8812	7/10/97 CA970930006
(CAN) BROKEN FLAP TRACK FOUND ON ROUTINE INSPECTION.									
2700		LET L13BLANIK				CABLES L1340213A402092M	WORN PULLEYS	1304	7/26/96 CA960802004
(CAN) WHILE CARRYING OUT AN ITRAN INSPECTION, A MOUSE NEST PROMPTED AN INSPECTION FOR CORROSION UNDER THE COCKPIT FLOOR. CABLES IN THAT AREA WERE FOUND TO HAVE AN UNACCEPTABLE AMOUNT OF BROKEN WIRES IN THE AREA OVER THE PULLEYS. THE PREVIOUS LOGS SHOW THAT THE CABLES WERE REPLACED IN JULY OF 1995. AN AME FAMILIAR WITH THIS AIRCRAFT TOLD THE SUBMITTER THAT THIS AREA HAS HAD PROBLEMS BEFORE.									
5540		LET L13BLANIK				ATTACH BOLT 3030501	WRONG SIZE RUDDER HINGE		7/26/96 CA960802002
(CAN) DURING THE ITRAN PROCEDURE, IT WAS NECESSARY TO REPLACE THE RUDDER CABLE ASSEMBLY. THIS REQUIRED THE REMOVAL OF THE RUDDER. REMOVING THE FABRIC PATCH COVERING THE ACCESS HOLE TO THE UPPER HINGE NUT, CASTLATED, THERE WAS NO COTTER PIN INSTALLED AND THE COTTER PIN HOLE WAS FAR BELOW THE NUT. DURING RE-ASSEMBLY INSTALLATION OF THE BOLT REMOVED FROM THE TOP HINGE BOTTOMED OUT ON THE NUT. WASHERS WERE INSTALLED TO BRING THE MEASUREMENTS WITHIN TOLERANCE. COTTER PIN INSTALLED.									
2731		MTSBSI MU2B30				CABLE 010A6117931	FAILED ELEVATOR TAB CON		3/11/98 AU980250
(AUS) ELEVATOR TRIM CABLE FRAYED WITH ONLY ONE STRAND REMAINING . CABLE FAILED DURING REMOVAL. AIRCRAFT WAS PREVIOUSLY REGISTERED ASVH-UZN.									
3260		MTSBSI MU2B36A				SWITCH	FROZEN RT LDG		9/30/97 CA971027006
(CAN) AFTER TAKEOFF, RT MAIN LANDING GEAR DOWN LIGHT (GREEN) REMAINED ON WITH NO UNSAFE LIGHTS ON. LIGHT EXTINGUISHED AFTER 20 MINUTES. MAINTENANCE ACTION FOUND FROZEN LANDING GEAR DOWN SWITCH. AIRCRAFT WASHED PREVIOUS DAY AND LEFT OUTSIDE IN EXTREME COLD TEMPERATURE. SWITCH DRIED AND CLEANED.									
2740		PARTEN P68C				TORQUE TUBE 6853029	CORRODED HORIZ STABILIZER		3/26/98 AU980328
(AUS) STABILATOR TORQUE TUBE CORRODED. INSPECTION FOUND RUST ON BOTH THE INTERNAL AND EXTERNAL SURFACES.									
2823		PARTEN P68B				FITTING	LOOSE FUEL SELECTOR		1/8/98 AU980215
(AUS) RT ENGINE SURGED AND FAILED. LT ENGINE SURGED AND THEN FAILED DURING TAXI FOLLOWING LANDING. INVESTIGATION FOUND THAT THE RT FUEL SELECTOR FITTING WAS LOOSE ALLOWING AIR TO ENTER THE FUEL SYSTEM CAUSING THE RT ENGINE TO STOP. NO POSITIVE CAUSE WAS IDENTIFIED FOR THE STOPPAGE OF THE LT ENGINE.									
3411		PARTEN P68B			6877519	HOSE 6874017	DETERIORATED PITOT/STATIC		3/27/98 AU980317
(AUS) PITOT/STATIC SYSTEM HOSE DETERIORATED. SILICON HOSE APPEARS TO BE BREAKING DOWN AND EXUDING AN OILY FILM WHICH IS PARTIALLY BLOCKING THE STATIC AIR DISTRIBUTOR MANIFOLD.									

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5414		PARTEN P68B				SKIN 68120237	CORRODED RT ENG NAC		3/24/98 AU980318
(AUS) RT ENGINE LOWER NACELLE SKIN SEVERELY CORRODED INTERNALLY. SKIN IS LOCATED ABOVE THE EXHAUST GAS STREAM. PART OF THE NACELLE LATERAL BEAM WAS ALSO CORRODED.									
5711		PARTEN P68C			6814002	SPAR 6814001	CORRODED LT RT WING		3/26/98 AU980327
(AUS) LT AND RT WING SPARS P/N 68-1.4001 AND P/N 68-1.4002 CONTAINED INTERGRANULAR AND EXFOLIATION CORROSION IN THE WEBS LOCATED BEHIND THE ENGINE FIREWALLS.									
3260		PILATS PC12				BOLT 9321912044	SHEARED RT WOW SWITCH	418	12/17/97 CA980330026
(CAN) UNABLE TO SELECT GEAR UP ON DEPARTURE, RETURNED TO BASE. SWITCH CLEANED OF SLUSH. SAME PROBLEM OCCURRED BUT WAS CLEARED BY RESETTNG CIRCUIT BREAKER. AFTER RETURN TO BASE, ANNUNCIATOR ILLUMINATED. INVESTIGATION FOUND THAT RT WEIGHT- ON-WHEEL TARGET RETAINING BOLT WAS SHEARED ALLOWING TARGET TO MOVE OCCASIONALLY. BOLT REPLACED AND GEAR SWING CHECKED OK.N PART TC: 273.									
2810		PILATS PC6B1H2				COLLECTOR TANK	CONTAMINATED FUEL SYS		4/16/96 CA960503104
(CAN) COLLECTOR TANK WAS FULL OF FOAM WHICH WAS DETERIORATING FROM THE FUEL. IT WAS FOUND IN THE FUEL FILTERS. TANKS CLEANED.									
3213		PIPER PA28151				CYLINDER 6531904	CRACKED MLG		2/20/98 AU980233
(AUS) MAIN LANDING GEAR CYLINDER CRACKED IN AREA OF TORQUE LINK ATTACHMENT LUG RADIUS.									
5711		PIPER PA28R201			6244803	FITTING 6244802	CORRODED LT RT AFT SPAR		3/8/98 AU980294
(AUS) LT AND RT REAR SPAR ATTACHMENT FITTINGS P/N 62448-02 (LT) AND P/N 62448-03 (RT) CORRODED.									
2140		PIPER PA31350		JANITROL 65D792		TUBE ASSY 87D133	PUNCTURED HEATER	526	3/31/98 CA971104009
(CAN) DECAY TEST HAD BEEN CARRIED OUT ON HEATER. PILOT CLOSED AIR INLET FOR A SHORT TIME CAUSING OVERHEATED CB TO POP. MAINTENANCE RESET OVERHEATED CB AND CLEARED IGNITER. FUNCTIONAL TEST OF HEATER CARRIED OUT, HOWEVER, DECAY TEST CARRIED OUT WITH NEGATIVE RESULTS. HEATER WAS REMOVED FOR FURTHER INSPECTION AND IT WAS FOUND THE INNER CAN WAS WARPED AND HAD A PUNCTURE. A MORE FREQUENT INSPECTION OF THE HEATER IS RECOMMENDED TO PREVENT FUTURE PROBLEMS.									
2810		PIPER PA31				SEAL	MISSING RT MAIN FUEL		3/6/98 AU980257
(AUS) RT MAIN FUEL TANK CAP SEAL MISSING. AIRCRAFT FLEW THROUGH HEAVY RAIN ALLOWING WATER TO ENTER FUEL TANK. RT ENGINE FAILED DUE TO WATER CONTAMINATION. PERSONNEL/MAINTENANCE ERROR.									
3213		PIPER PA31			4041302	HOUSING 40327000	CRACKED LT MLG STRUT	10073	3/26/98 CA971021003
(CAN) AFTER LANDING, PILOT REPORTED LT LANDING STRUT WAS FLAT AND LEAKING FLUID. MAINTENANCE INSPECTION REVEALED STRUT HOUSING HAD A 16 INCH VERTICAL CRACK. HOUSING REPLACED.									
3220		PIPER PA31350			5521402	HOUSING ASSY 4531603	CRACKED NLG	10594	11/4/97 CA971112009
(CAN) IMPROPER TOWING AND TAXIING HAS CONTRIBUTED TO THE FAILURE OF THE NOSE LANDING ASSY HOUSING. TURNING RIGHT, HOUSING IS WEAKER IN DESIGN AND AFTER CRACKING COLLAR SLIPS UNDER STOPS, FORCES IT OUT, THEN THE STEERING MECHANISM ACTS AS A LIMITER. IN THIS CASE, BOLTS 401268 (AN3H-10A) AND 400743 (AN25-38) HAVE BEEN FOUND BENT. ONE BOLT AN3H-10A NEARLY SHEARED AND TWO AN3-7A BOLTS RETAINING STEER ARM TO CYLINDER SHOWED SIGNS OF STRAIN.									

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3230		PIPER PA31310				ROD END 762685	SEVERED ACTUATOR	6284	2/14/97 CA970227002
(CAN) RIGHT MAIN GEAR FAILED TO RETRACT, AND WOULD NOT INDICATE DOWN AND LOCKED. ROD END FOUND SEVERED FROM ACTUATOR.									
3260		PIPER PA31				SWITCH 487862	OUT OF ADJUST NLG DOWN LOCK		2/17/97 CA970226001
(CAN) ON APPROACH, GEAR SELECTED DOWN, 2 GREEN AND A RED WARNING. EVENTUALLY LANDED. AT MOMENT OF TOUCHDOWN, GEAR CYCLE COMPLETED, AND GEAR DOORS CLOSED AND NORMAL INDICATOR LIGHT OPERATION RESTORED. NOSE GEAR DOWNLOCK SWITCH WAS OUT OF ADJUST.									
3260		PIPER PA31350				SWITCH 1CH214	FAILED MLG		10/24/97 CA971031002
(CAN) ON SELECTING GEAR DOWN, RT GEAR SHOWED GREEN AND RED UNSAFE LIGHT ON. SEVERAL RETRACTIONS CARRIED OUT, NO CHANGE. TOWER REPORTED GEAR APPEARED NORMAL AND A/C LANDED SAFELY. MAINTENANCE INSPECTED GEAR AND CONFIRMED GEAR WAS LOCKED AND SWITCH IN NORMAL POSITION. DEFECTIVE SWITCH REPLACED.									
3710		PIPER PA31350			AIRBORNE	PUMP 441CC	FAILED VAC SYS		2/19/97 1034 CA970226063
(CAN) VACUUM PUMP FAILED IN-FLIGHT. SPLINE BROKEN AND DISINTEGRATED. PUMP WAS SEIZED. SUBMITTER SUGGESTED THAT INSPECTION BE CARRIED OUT EVERY 500 HOURS TO DETERMINE PUMP SMOOTH OPERATION.									
5270		PIPER PA31	LYC TIO540A2B			PIN	BROKEN BS 111.5	7393	11/26/97 CA971216073
(CAN) PASSENGER DOOR AJAR WARNING LIGHT INOPERATIVE. MUCH TROUBLE TO FIND THAT A PIN IN A BLOCK CONNECTOR UNDER AND BEHIND THE CIRCUIT BREAKER AND SWITCH PANEL HAD BROKEN. THIS PIN CONNECTS WIRES L54EE TO L57ED AND RUNS UNDER SOME UPHOLSTERY TO REAR OF AIRCRAFT.									
5512		PIPER PA31				STABILIZER	FOD HORIZ STABILIZER		3/8/98 AU980315
(AUS) LT HORIZONTAL STABILIZER LEADING EDGE FOD. DAMAGE LOCATED INBOARD OF STN 78.5.									
5521		PIPER PA31350			5423235	RIB ASSEMBLY 4374301	CRACKED RT ELEV	12634	11/27/97 CA971219012
(CAN) WHEN REPLACING MAIN SPAR IN RIGHT HAND ELEVATOR PER SB 998A, THE END RIB ASSY WAS FOUND CRACKED WHERE THE SPAR ATTACHES TO THE RIB. CRACK ABOUT .50 INCH LONG. AIRCRAFT TT: 12,445 HOURS.									
5751		PIPER PA31	LYC		4020042	SPAR 4019016	CRACKED AIL INB HINGE	12327	3/25/98 CA980330021
(CAN) PIPER SB 974 HAD BEEN COMPLETED AS TERMINATING ACTION FOR AWD 92-21-03. NEW HINGE INSTALLED. CRACK WAS FOUND AS A RESULT OF A FLEET INSPECTION DUE TO CRACKING OF ANOTHER AIRCRAFT IN THE FLEET. REF: SDR CA980330022, SDR CA980330023. AIRCRAFT TT: 12,156 HOURS.									
5751		PIPER PA31350			4020042	SPAR 4019016	CRACKED AIL INB HINGE	9583	3/25/98 CA980330022
(CAN) PIPER SB 974 HAD BEEN COMPLETED AND HINGE P/N 74461-02 HAD BEEN INSTALLED. THIS WAS TERMINATING ACTION FOR AWD 96-21-03. THE CRACK WAS FOUND DURING A RE-SKINNING OF THE AILERON. FOUR OTHER AILERONS ON THE FLEET WERE INSPECTED AND THREE WERE FOUND CRACKED. REF: SDR CA980330023, SDR CA980330021. AIRCRAFT TT: 8,362 HOURS.									
5751		PIPER PA31350			4020043	SPAR 4019017	CRACKED AIL INB HINGE	9583	3/25/98 CA980330023
(CAN) SB 974 HAD BEEN COMPLIED WITH AS TERMINATING ACTION FOR AWD 96-21-03. NEW PARTS WERE INSTALLED. CRACK WAS FOUND AS A RESULT OF A FLEET INSPECTION AFTER CRACKS FOUND ON ANOTHER AIRCRAFT. REF: SDR CA98033021, SDR CA98033022. AIRCRAFT TT: 8,362 HOURS.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT (cont'd)

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6120		PIPER PA31350			DWG42116	BALLJOINT 5417500	WORN PROP GOVENOR	10562	10/17/97 CA971024014
(CAN) DURING REMOVAL OF THE PROPELLER GOVERNOR FOR OVERHAUL, IT WAS FOUND THAT THE PITCH CONTROL CABLE SEPARATED EASILY FROM ITS HOLDING CASE. ON CLOSER INSPECTION, THE BALL JOINT WAS FOUND SEVERLY WORN. THE LOCATION OF THE WORN AREA COULD NOT BE SEEN VISUALLY WHEN CONNECTED. THE INSPECTION OF THE BALL JOINT IS MORE PRECISE WHEN THE BALL JOINT IS DISCONNECTED, CLEANED, AND A MAGNIFYING GLASS USED. INSPECTION SHEETS WILL BE AMENDED TO INSPECT THE BALL JOINT AT 500 HRS. ALSO, IT IS RECOMMENDED THE BALL JOINT BE REPLACED AT THE 1000 HR. INSPECTION.									
3260		PIPER PA44180			89291003	HARNESS 89291003	BROKEN RT MLG SWITCH	162	5/7/97 CA970513019
(CAN) GEAR WAS SELECTED DOWN AND THE RT HAND GEAR SAFE LIGHT WOULD GO OUT INTERMITTENTLY. INVESTIGATION FOUND THE WIRE GOING INTO THE SWITCH BODY WAS BROKEN.									
3260		PIPER PA44180			89291003	HARNESS 89291003	BROKEN LT MLG SWITCH	410	5/6/97 CA970513018
(CAN) GEAR WAS SELECTED UP AND THE LT SAFE LIGHT WOULD NOT ILLUMINATE. INVESTIGATION FOUND A WIRE HAD BROKEN OFF AT THE ENTRY POINT OF THE WIRE INTO THE BODY OF THE SWITCH.									
7603		PIPER PA44180	LYC O360E1A6			CABLE 554528	BROKEN THROTTLE	4385	10/31/97 CA971110007
(CAN) RT ENGINE CONTROL FAILED ON APPROACH. INVESTIGATION REVEALED BREAK OCCURRED AT COCKPIT END OF THROTTLE CONTROL APPROXIMATELY .25 INCH FROM SWAGED FITTING. BOTH CONTROL CABLES RT AND LT REPLACED.									
3244		REIMS F406	PWA PT6A112	MCAULY 3GFR34C701		TIRE	DAMAGED MLG		1/30/98 AU980066
(AUS) TIRE CONTAINED FLAT SPOT. FOUND DURING INSPECTION FOLLOWING ABORTED TAKEOFF DUE TO BIRD STRIKE AVOIDANCE.									
2750		ZLIN Z242L			MORAVAN Z14343110000	FLAP CONTROL CSN02210724	DEFECTIVE DETENT PIN	1130	4/22/97 CA970918003
*****	(CAN) AS A RESULT OF DOING A FLEET INSPECTION THE FLAP CONTROL LEVER DETENT PIN WAS FOUND MIGRATING OUT OF POSITION DUE TO FAILURE OF THE COTTER PIN. SUBMITTER RECOMMENDS INSPECTING THIS AREA.								
(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT)									

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS

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2916		AEROSP AS355F1				RESERVOIR 355A7513300401	CRACKED HYDRAULIC	2/26/98 6246	AU980213
(AUS) HYDRAULIC RESERVOIR CRACKED IN AREA AROUND OUTLET PIPE .									
7250		AEROSP AS355F1	ALLSN 250C20F			TURBINE ASSY	DAMAGED FIRST STAGE	5328 2293	8/13/96 CA960910039
(CAN) DURING OPERATIONS, THE PILOT HEARD A VIOLENT NOISE FROM HIS RIGHT SIDE. INSTRUMENTS CONFIRMED ENGINE WAS LOST. PILOT PICKED UP AIRSPEED AND WAS ABLE TO CARRY OUT A ONE ENGINE LANDING. PRELIMINARY INVESTIGATION REVEALED SUBSTANTIAL DAMAGE TO THE FIRST STAGE WHEEL AND NOZZLE. PART TC: 6,336.									
2550		AEROSP SA365C			LUCAS	CABLE CUTTER	MALFUNCTIONED HOIST	3/2/98 312	AU980216
(AUS) HOIST CABLE CUTTER FIRED AND CUT CABLE. HOIST CONTROL WAS IN THE 'OFF' POSITION.									
6322		BELL 204B	LYC T5313B			BEARING 9103PP	ROUGH BLOWER ASSY	7/27/96 162	CA960802003
(CAN) HIGH TO MEDIUM FREQUENCY VIBRATION WAS BEING DETECTED BY THE PILOT THROUGH THE TAIL ROTOR PEDALS. EXAMINATION FOUND BLOWER ASSEMBLY MAKING VIBRATION. REPLACED ASSEMBLY AND RECTIFIED PROBLEM.									
5531		BELL 205A1				SPAR 205032899	CRACKED VERT FIN	15439	8/25/97 CA970916001
(CAN) FOUND CRACK ORIGINATING FROM A RIVET HOLE TO THE EDGE OF THE SPAR, AND ANOTHER CRACK FROM RIVET HOLE INBOARD PER AD 97-18-01. AIRCRAFT TT: 15,439 HOURS.									
7310		BELL 205A1	LYC T5313B			TUBE ASSEMBLY 117050001	BROKEN PURGE SYSTEM	12/28/97	CA980403008
(CAN) TUBE ASSEMBLY, PURGE SYSTEM, FOUND BROKEN AT THE BRAZING. THIS ASSEMBLY IS IN THE FUEL STARTING SYSTEM.									
2844		BELL 206B				SWITCH 7G547	FAILED FUEL PRESS	3/26/97	CA970421060
(CAN) FUEL PRESSURE LIGHT DID NOT ILLUMINATE. FUEL PRESSURE SWITCH REPLACED.									
2913		BELL 206B	ALLSN 250C20		LSI 206076022005	SPLINES CC211981	WORN HYD PUNP	8/2/97 1645	CA971015039
(CAN) METAL FOUND IN HYDRAULIC FILTER. SEVERE WEAR ON OIL PUMP SHAFT SPLINES AND ADAPTER. SUSPECT HYDRO PACK SHAFT BENT. REPLACED.									
3020		BELL 206L	ALLSN 250C20B			VALVE ANTI ICE 6852176	CRACKED GUIDE	12/24/96	CA970421057
(CAN) ANTI-ICE VALVE GUIDE ASSY CRACKED ALLOWING THE GUIDE ASSY LEVER SUPPORT TO SEPERATE FROM THE VALVE ASSY B-NUT. REPLACED.									
3213		BELL 206B	ALLSN 250C20			SUPPORT 206050286101	DAMAGED CROSSTUBE	14692	7/5/97 CA970424006
(CAN) CROSSTUBE SUPPORT STRUCTURE DAMAGED. REPAIR CARRIED OUT.									
3213		BELL 206L4				SADDLE 206033108001	CRACKED CROSSTUBE	4/30/96	CA970513007
(CAN) SKID GEAR SHIFTED Laterally ALLOWING SADDLE TO WEAR ON LUG ON SKID CROSS TUBE.									

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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5302		BELL 206B	ALLSN 250C20B			FITTING 206031329001	CRACKED TAILBOOM	9570	9/26/97 CA971003005
(CAN) CRACK FOUND RUNNING VERTICALLY BETWEEN RIVET HOLES. PART REPLACED WITH UPGRADE P/N 206-031-329-103S. THIS IS AT TAIL BOOM ATTACH.									
5311		BELL 206B	ALLSN 250C20			FRAME 206031303049	CRACKED BS 142.3	9021	5/2/97 CA970526005
(CAN) FOUND RIVET LOOSE AT STA 142.33. CHECK INSIDE AIRFRAME REVEALED FRAME CRACKED. AIRCRAFT TT: 9,419 HOURS.									
5312		BELL 206B	ALLSN 250C20			BULKHEAD 206030446001F	CRACKED T/R GEARBOX	9021	5/2/97 CA970526006
(CAN) CRACK FOUND AT TAIL ROTOR GEARBOX ATTACHMENT POINT. LEFT REAR BOLT HOLE. AIRCRAFT TT: 9,419 HOURS.									
5313		BELL 206B	ALLSN 250C20			LONGERON 206031314021	DAMAGED ENGINE PAN	14692	7/5/97 CA970424004
(CAN) LEFT HAND ENGINE PAN LONGERON REPLACED. AIRCRAFT TT: 14,791 HOURS.									
5320		BELL 206B	ALLSN 250C20			WEB 206031309013	DAMAGED RT BAG COMPT	14692	7/5/97 CA970424003
(CAN) CANTED WEB IN BAGGAGE COMPARTMENT AREA DAMAGED. AIRCRAFT TT: 14,791 HOURS.									
5320		BELL 206B	ALLSN 250C20			ROOF SHELL 206031201179	DAMAGED LEFT	14692	7/5/97 CA970424001
(CAN) LEFT HAND ROOF SHELL DAMAGED. AIRCRAFT TT: 14,791 HOURS.									
5320		BELL 206B	ALLSN 250C20			ROOF SHELL 206031201179	DAMAGED FORWARD LOWER	14692	7/5/97 CA970424002
(CAN) FORWARD LOWER ROOF SHELL DAMAGED.									
6200		BELL 206B	ALLSN 250C20B			MAIN ROTOR SYS	STOPPAGE DRIVE SYS		2/13/98 AU980262
(AUS) MAIN ROTOR, TAIL ROTOR AND DRIVE SHAFT COMPONENTS - SUSPECT FOLLOWING DYNAMIC ROLLOVER ON 2/13/98.									
6220		BELL 206B	ALLSN 250C20			ROTOR HEAD 206011100021	OFFSET TRUNNION	9765	4/14/97 CA970528017
(CAN) MAIN ROTOR BALANCED AND ALIGNED STATICALLY PRIOR TO INSTALLATION. SEVERE VIBRATIONS ON GROUND RUN. TRUNNION WAS FOUND TO BE OFFSET BY 0.009 INCH. ADJUSTMENT SCREWS COULD NOT BE ADJUSTED.									
6240		BELL 206B	ALLSN 250C20			SUPPORT ASSY 206061733005	CRACKED DROOP COMP		4/7/97 CA970422021
(CAN) DROOP COMPENSATOR SUPPORT ASSEMBLY FOUND CRACKED. CRACK WAS APPROX 1 INCH BELOW PIVOT POINT FOR THE BELLCRANK ON THE INBOARD PORTION OF THE SUPPORT.									
6310		BELL 206B				FREEWHEEL 206040230014	LEAKING M/R DRIVE	10787 1011	3/31/97 CA970609004
(CAN) CENTER PLUG LEAKING OIL INTO CAVITY BETWEEN FREEWHEELING UNIT AND INPUT DRIVE SHAFT FLANGES. OIL THEN TRANSFERRING INTO DRIVE SHAFT COUPLING VIA VENT HOLE IN COUPLING CAP. GREASE IN COUPLING IS DILUTED BY OIL CAUSING GREASE LEAKAGE. PART TC: 6,770.									
6320		BELL 206B	ALLSN 250C20			TRANSMISSION 206040002025	LEAKING MAG SEAL	6210 845	4/16/97 CA970528015
(CAN) MAGNETIC SEAL SQUEELING ON SHUT DOWN SINCE INSTALLATION. OIL DARK AND BLACK, NON-MAGNETIC FILM IN FILTER.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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6322		BELL 206L1	ALLSN 250C28B			TUBE 206040544001	CHAFED OIL COOLER		5/18/97 CA970528025
(CAN) TRANSMISSION OIL COOLER LINE IS CHAFED.									
6330		BELL 206B	ALLSN 250C20			MOUNT 206030539101	LOOSE M/R XMSN	253	4/16/97 CA970609005
(CAN) ISOLATION MOUNT COVER AND SCREWS LOOSE, CAUSING INTERMITTANT VIBRATION IN FLIGHT.									
6510		BELL 206B	ALLSN 250C20		327211	DISC PACK 327211	CRACKED T/R DRIVE		8/5/97 CA971015040
(CAN) TAIL ROTOR DRIVE SHAFT FORWARD COUPLING, LOCATED IN ENGINE COMPARTMENT, 3 DISCS CRACKED DUE TO ENGINE MIS-ALIGNMENT. REPLACED.									
6520		BELL 206B	ALLSN 250C20			SEAL 206040400005	LEAKING T/R GRBOX	15827 1837	3/31/97 CA970609003
(CAN) INPUT SEAL AREA WOULD NOT STOP LEAKING . FOUR SEALS AND SPACERS CHANGED WITH NO SUCCESS.									
6520		BELL 206B	ALLSN 250C20			GEARBOX 2060404005	LEAKING INPUT SEAL	10192 3764	3/10/97 CA970421044
(CAN) INPUT SEAL LEAKING. 5 ATTEMPTS AT SEAL REPLACEMENT COULD NOT STOP GEARBOX LEAKING, GEARBOX REPLACED.									
6520		BELL 206B	ALLSN 250C20			INPUT SEAL 206340103101	LEAKING TAIL ROTOR INPUT	277	5/22/97 CA970528012
(CAN) SEAL HAS LEAKED EXCESSIVELY SINCE INSTALLATION IN TAIL ROTOR GEARBOX.									
7120		BELL 206B	ALLSN 250C20			ATTACHMENT 206061101020	DAMAGED FWD ENG MT	14692	7/5/97 CA970424005
(CAN) FORWARD ENGINE ATTACHMENT DAMAGED. REPAIR CARRIED OUT.									
7120		BELL 206B	ALLSN 250C20			LEG 2060621021	CRACKED LOWER SUPPORT		3/22/97 CA970422002
(CAN) CRACK FOUND AT AIRFRAME SIDE OF ENG MOUNT ATTACHMENT.									
7210		BELL 206L	ALLSN 250C20			GEARBOX 23035185	SEPARATED STUDS	6481 3355	3/24/98 CA971014007
(CAN) AFTER REMOVING CASEY HEATER SHROUD, THE 4.3125 INCH NUTS WERE REMOVED FROM TURBINE TO GEARBOX, LEAVING TOP .3750 INCH NUT REMAINING. AFTER TAKING WEIGHT OF TURBINE, NOTED HOW LOOSE IT WAS. TURBINE WAS REMOVED BY HAND. THE SHROUD WITH NUT WAS STILL IN THE TURBINE. THE HELICOIL HAD COME OUT OF THE GEARBOX. REPAIRED. TIME SINCE LAST REMOVAL 233 HRS.									
7230		BELL 206B	ALLSN 250C20			BOLT 684946812142	CRACKED COMPRESSOR		1/30/97 CA970206015
(CAN) WHILE BUILDING UP AN ENGINE AND INSTALLING A COMPRESSOR, THE BOLT USED TO RETAIN THE COMPRESSOR TO THE GEARBOX. IT WAS A NEW BOLT, BUT UPON CLOSE EXAMINATION USING A GLASS, A CRACK WAS FOUND WHERE THE LANDS CONVERGE.									
7230		BELL 206B	ALLSN 250C20		6990550	STATOR VANE 6899394	BENT 4TH STAGE		9/18/97 CA971006003
(CAN) COMPRESSOR STALL OCCURRED DURING FLIGHT FOLLOWED BY HIGH T.O.T., POWER REDUCED TO LOWER T.O.T. BELOW RED LINE. ON LANDING, POWER APPLIED TO CHECK DESCENT. INVESTIGATION REVEALED DAMAGE TO STATOR VANE 4TH STAGE.									

***** DENOTES SIGNIFICANT OCCURRENCE

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7230		BELL 206B	ALLSN 250C20		6876667	RING GROOVES	WORN FRONT SEAL		1/7/98 CA970421038
(CAN) FRONT SEAL RING GROOVES WORN BEYOND LIMITS.									
7230		BELL 206L	ALLSN 250C20B			EXDUCER 6876667	CRACKED COMPRESSOR		7/26/96 CA960801021
(CAN) WHILE DOING A TURBINE CHANGE, AME FOUND A CRACK IN THE COMPRESSOR DISCHARGE TUBE. SUSPECT CRACK WAS CAUSED BY MECHANICAL DAMAGE.									
7230		BELL 206L	ALLSN 250C20		23038126	BEARING 23009609	SPALLING COMPRESSOR		9/9/97 CA970916016
(CAN) CHIP LIGHT IN FLIGHT. A/C LANDED. METAL ON PLUG. SEVERAL RUNUPS AND METAL ON PLUGS. COMPRESSOR CHANGED. NR 1 BEARING ROLLERS HAD SPALLING ON END. BEARING AND SEALS REPLACED.									
7240		BELL 206B	ALLSN 250C20		ALLISON 23056130	LINER 23056130	CRACKED COMBUSTER		9/2/97 CA971015047
(CAN) CRACK FOUND IN LIP AREA CUMBUSTOR LINER ALSO MAKING HARD CONTACT WITH NOZZLE AREA.									
7240		BELL 206L1	ALLSN 250C28B			BEARING 6873002	FAILED ENG NR 2	78038 566	10/1/97 CA971021002
(CAN) ENGINE CHIP LIGHT CAME ON DURING APPROACH, LANDED, NR 2 BEARING IN ENGINE GENERATING METAL. PART TC: 7,004.									
7260		BELL 206B	ALLSN 250C20B		68760300	STUD 68760300	LOOSE ENG ASSORY DRV		2/11/98 CA970421050
(CAN) LOOSE STUD ON ENGINE ACCESSORY DRIVE GEARBOX. REPLACED.									
7261		BELL 206B	ALLSN 250C20		ALLISON 6898734	FITTING 6877896	REVERSED ENG SCAV OIL		10/1/97 89 CA971113042
(CAN) SCAVENGE OIL FITTING LEAKED SINCE OVERHAUL INSTALLATION. OIL FITTING INSTALLED BACKWARDS. FITTING INSTALLED PROPERLY AND NEW SEALS INSTALLED.									
7313		BELL 206B	ALLSN 250C20B		6898735	NOZZLE 6898735	CRACKED ENGINE		2/11/98 CA970421049
(CAN) FUEL NOZZLE CRACKED BEYOND LIMITS. REPLACED.									
7320		BELL 206B	ALLSN 250C20			LINE 6875632	LEAKING FUEL CONTROL	3407	12/19/97 CA971231009
(CAN) FUEL NOTED DRIPPING FROM THE ENGINE COMPARTMENT OVERBOARD DRAIN. FUEL LINE BETWEEN FUEL CONTROL AND GOVERNOR LEAKING.									
7320		BELL 206B	ALLSN 250C20B		BENDIX 23057344	BYPASS VALVE	STUCK ENG FUEL	2324	12/17/96 CA970528021
(CAN) UNABLE TO ADJUST START CYCLE. COMPRESSOR STALLING AND FAST EXCELLERATION OF N1 RPM NOTED AT 20 PER N1. FUEL PRESSURE WAS NOTED AS HIGH AS +30 PSI. POSSIBLE BYPASS VALVE STUCK OPEN. REPLACED.									
7320		BELL 206B	ALLSN 250C20			TUBE 6875630	CRACKED GOV	5443	12/19/97 CA971231008
(CAN) AIR LINE FROM COMPRESSOR SCROLL TO GOVERNOR CRACKED AT FLARE AT SCROLL END. THIS CAUSED ENGINE TO GO TO IDLE.									
7320		BELL 206B	ALLSN 250C20B		BENDIX 252464424	FUEL CONTROL 252464424	DEFECTIVE ADJUSTER		12/17/96 219 CA970528020
(CAN) GROUND IDLE RPM DROPPED TO 57 PERCENT N1 IDLE SPEED. ADJUSTMENT SCREW FOUND TO BE EASY TO ROTATE BY HAND. NO BUILT IN FRICTION FELT. REASON FOR LAST REMOVAL. REPLACED.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS (cont'd)

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7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE	1593	10/21/97 CA971113055
(CAN) INSTALLED UNIT STARTS COOL AND SLOW. SUBSEQUENT START AFTER ADJUSTMENT LIGHT-OFF OCCURRED IMMEDIATELY, THROTTLE WAS IN CUTOFF POSITION. START ABORTED WITH FUEL VALVE BEING SELECTED OFF. FUEL FLOW WAS NOTED AT ALL TIMES, EVEN AT CUTOFF POSITION. FUEL CONTROL UNIT REPLACED. PART TC: 1.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE	1826	10/1/97 CA971113051
(CAN) EXTREMELY HOT STARTS, HANGS AT 50-55 PERCENT N1. TRIM ADJUSTMENT LIMITS REACHED WITH NO EFFECT. FUEL CONTROL UNIT REPLACED.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE	1216	10/1/97 CA971113043
(CAN) SLOW STAGNATED STARTS. THROTTLE ADVANCE NECESSARY TO ACHIEVE GROUND IDLE. FUEL CONTROL UNIT REPLACED.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE	2	10/1/97 CA971113049
(CAN) SLOW COOL, INTERMITTENT HUNG STARTS, IDLE INCONSISTENT, TRIM ADJUSTMENT LIMITS REACHED WITH NO EFFECT. FUEL CONTROL UNIT REPLACED.									
7322		BELL 206B	ALLSN 250C20		CECO 23034702	FCU 23034702	ERRATIC ENGINE	72	9/13/97 CA971015050
(CAN) FUEL CONTROL THROTTLE RESPONSE ERRATIC AFTER IDLE. NO RESPONSE TO ADJUSTMENTS. REPLACED.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILED ENGINE	2	9/15/97 CA971113050
(CAN) FIRST START OF DAY IS LONG AND COOL, IDLE IS INCONSISTENT. COULD NOT ADJUST TO CORRECT. FUEL CONTROL UNIT REPLACED.									
7323		BELL 206B	ALLSN 250C20			GOVERNOR 23006259	OVERSPEED ENGINE	546	3/18/97 CA970528018
(CAN) ENGINE OVERSPEEDS AND GOVERNOR WILL NOT RECOVER. PART TC: 9,362.									
7420		BELL 206B	ALLSN 250C20B		UNISON 106149501	EXCITER 106149501	STRIPPED ENG IGN	8346	2/11/98 CA970421052
(CAN) STRIPPED THREADS ON CONNECTIONS, POSSIBLY CORROSION. REPLACED.									
7420		BELL 206B	ALLSN 250C20B			LEAD 6870855	STRIPPED THREADS		2/11/98 CA970421051
(CAN) STRIPPED THREADS ON LEAD CONNECTOR, CORROSION MAY BE CAUSE. REPLACED.									
7500		BELL 206B	ALLSN 250C20			LINE 6876294	BROKEN BLEED VALVE	7590	11/12/97 CA971216001
(CAN) RIGID LINE BETWEEN BLEED VALVE AND COMPRESSOR SCROLL FITTING ALMOST BROKEN OFF.									
7530		BELL 206B	ALLSN 250C20			TUBE 6876294B	FAILED BLEED SENSE	15	9/18/97 CA970926003
(CAN) BLEED AIR SENSE TUBE FOUND BROKEN. 15 HOURS LATER, SENSE LINE BROKE AGAIN. 25 HOURS LATER ANOTHER LINE INSTALLED. SUBMITTER SUSPECTS THAT WHEN COMPRESSOR WAS CHANGED, IT WAS SHIMMED WRONG OR THE COMPRESSOR HAD A VIBRATION CAUSING LINE TO BREAK.									
7714		BELL 206B	ALLSN 250C20			TACH GENERATOR 206062627003	SHEARED N1 SHAFT		3/11/97 CA970421043
(CAN) N1 TACH GENERATOR SHAFT SHEARED.									

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7920		BELL 206B	ALLSN 250C20			TUBE 206061541001	LEAKING OIL SYS		3/20/97 CA970421059
(CAN) TUBE ASSEMBLY LEAKING. TUBE ENCASED IN HEAT SHRINK MAKING IT DIFFICULT TO ASCERTAIN ACTUAL AREA OF LEAKAGE.									
6730		BELL 212	PWA PT6T3			LINE 70012J220W234	CHAFED FLT CONTROL		3/7/97 CA970421046
(CAN) FLIGHT CONTROL SERVO HYDRAULIC LINES P/N 7--012J220W234 AND 70-012V000G146 WERE CHAFED THROUGH AND LEAKING DUE TO IMPROPER CLAMPING.									
5530		BELL 407			206020113223	SKIN 206020113181	DAMAGED VERT STAB		9/29/97 CA971007014
(CAN) INSPECTION OF FINS FOUND THAT TWO GRINDING MARKS WERE MADE DURING MANUFACTURE AT AFT BOTTOM SECTION OF FORMERS FOR INSTALLATION OF FAIRINGS. AN ASB WILL BE ISSUED TO COVER.									
7230		BELL 412	PWA PT6T3B			COMPRESSOR	DAMAGED LT ENGINE		2/21/98 AU980231
(AUS) LT ENGINE COMPRESSOR DAMAGED.									
2730		BELL 47G3B				SPEED RIG D7200131A	FAULTY ELEVATOR CONTROL		3/16/98 AU980267
(AUS) ELEVATOR CONTROL SPEED RIG FERRULE MISSING FROM FORK CAUSING RIG TO BE INCORRECTLY LOCKWIRED. PERSONNEL/MAINTENANCE ERROR.									
6220		BELL 47G3B				NUT 471301161	WORN MAIN ROTOR HEAD	1093	3/11/98 AU980290
(AUS) MAIN ROTOR RETAINING NUT FACE WORN BY SEAL EDGE LIP.									
6220		BELL 47G3B				SUPPORT 471402511	CRACKED MAIN ROTOR HEAD		3/3/98 AU980234
(AUS) STABILIZER BAR DAMPER SUPPORT PLATE CRACKED AT ONE OF THE FOUR MOUNTING BOLT HOLES.									
6220		BELL 47G3B				NUT 471301161	WORN MAIN ROTOR HEAD	1093	3/11/98 AU980278
(AUS) MAIN ROTOR MAST NUT WORN. SEAL EDGE LIP WORN INTO NUT FACE.									
6220		BELL 47G3B1				PIN 471201412	DAMAGED MAIN ROTOR HEAD		2/1/98 AU980258
(AUS) MAIN ROTOR HUB BEARING PINS DAMAGED DUE TO MAIN ROTOR STRIKE. BEARINGS WERE ALSO UNSERVICEABLE. FOUND DURING STRIP OF MAIN ROTOR HUB FOR COMPLIANCE WITH AD/BELL47/92 AMDT4.									
6510		BELL 47G3B				DRIVE SHAFT 47644232101	WORN TAIL ROTOR		3/18/98 AU980287
(AUS) TAIL ROTOR DRIVE SHAFT COUPLING SPLINES WORN 0.3556MM (0.014 INCH) BELOW MINIMUM DIMENSIONS.									
6710		BELL 47G3B				BEARING 476310871	WORN MAIN ROTOR CONTR		3/18/98 AU980288
(AUS) PILOTS COLLECTIVE LEVER BEARING WORN. UNAPPROVED REPAIR HAD BEEN CARRIED OUT TO TAKE UP THE PLAY IN THE WORN SHAFT AND BEARING. UNAPPROVED REPAIR. PERSONNEL/MAINTENANCE ERROR.									
8520		BELL 47G3B1	LYC VO435A1F			STUD	FAILED ENG NR 5 CYL		3/3/98 AU980259
(AUS) NR 5 CYLINDER HOLD DOWN STUDS FAILED.									

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6300		BOEING 1072			A020301110	EXTENSION A02D31473R	CRACKED UPPER	2618	8/18/97 CA971007001
(CAN) ON 100 HOUR INSPECTION IAW SB 107-393, A POSITIVE IDENTIFICATION WAS DETECTED. MAG PARTICLE INSPECTION FOUND A CRACK IN A PIN HOLE APPROX 0.150 INCH LONG.									
6320		BOEING 1072			107D2011515A	CASE 107D22319	LEAKING LOWER		9/15/97 CA971007002
(CAN) TRANSMISSION STARTED LEAKING OIL. CRACK FOUND IN LOWER CASE. OIL COMING FROM MIXBOX.									
7230		CARSON S61LSKRSKY	GE CT581401			B NUT	CROSS THREADED T2 HARD LINE	9/23/97 76	CA971113033
(CAN) ENGINE WOULD NOT ACCELERATE AFTER DESCENT WITH SLING LOAD EMERGENCY THROTTLE USED FOR LANDING. T2 HARD LINE B-NUT AT THE COMPRESSOR DISCHARGE FOUND CROSS THREADED. BELLOWS HAD ALL FOUR SCREWS LOOSE. B-NUT PROPERLY INSTALLED AND SCREWS TIGHTENED.									
7260		CARSON S61LSKRSKY	GE CT581401		GE 500IT90G06	GEAR 500IT90G06	BROKEN ACCESSORY BOX	4/18/97 816	CA970528014
(CAN) PIECE OF BEVEL GEARBOX FOUND ON FORWARD ACCESSORY GEARBOX CHIP DETECTOR AT PI CHECK, .250 INCH LONG BY .083 INCH WIDE. TWO TEETH FOUND MISSING ON MAIN GEAR, 1 TOOTH APART.									
7310		CARSON S61LSKRSKY	GE CT581401			SEAL MS29513242	CUT NR 1 ENG FUEL	3/8/98	CA970421045
(CAN) FUEL LEAKING FROM NR 1 ENG FUEL PURIFIER. "O" RING CUT IN TWO PLACES, POSSIBLY DONE ON INSTALLATION, REPLACED.									
7322		CARSON S61LSKRSKY	GE CT581401		HAMSTD 7257255	FCU 7257255	FAILED NR 2 ENGINE	10/23/97 254	CA971113034
(CAN) NR 2 ENG FAILED TO RESPOND TO THE POWER DEMAND. EMERGENCY THROTTLE WAS USED AND ENGINE RESPONDED. FCU REPLACED.									
6310		ENSTRM ENSTROM480	ALLSN 250C20			SHAFT 41291023	CRACKED AFT FLANGE AREA	1600	4/11/97 CA970422039
(CAN) CRACK ORIGINATING INSIDE SHAFT FLANGE, SPREADING OUTWARD UNTIL PAST FLANGE. THE CRACK TURNED 90 DEGREES AND SPREAD AROUND SHAFT.									
7261		ENSTRM ENSTROM480	ALLSN 250C20			SHAFT 41291023	CRACKED OIL COOLER	33	3/19/98 CA970513023
(CAN) IN-FLIGHT FAILURE OF OIL COOLER CONNECTING SHAFT.									
7910		ENSTRM ENSTROM480	ALLSN 250C20			OIL TANK 2060605051	CRACKED ATTACHMENT	1621	4/23/97 CA970506018
(CAN) ENGINE OIL TANK LOOSE, FOUND OIL TANK SUPPORT FLANGE HAD COMPLETELY BROKEN AROUND ONE ATTACHING BOLT HOLE									
2435		HUGHES 369E	ALLSN 250C20B		LEARSIEGLER 150SG1170	SHAFT 230321691	SHEARED START/GEN	9/12/97 838	CA970930022
(CAN) STARTER GENERATOR SHAFT SHEARED ON START UP.									
6310		HUGHES 369D	ALLSN 250C20B			CLUTCH 369D535051	LOOSE RING REAR BEARING	2/6/97 177	CA970421055
(CAN) WHILE PURGING THE BEARING ON THE OVER RUNNING CLUTCH, THE RING SECURING THE REAR BEARING CAP POPPED OFF. THE RING WAS REPLACED, BUT CAME OFF AGAIN AS GREASE WAS PURGED. PART TC: 228.									

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6410		HUGHES 369D	ALLSN 250C20B			BLADE 369D2161311N	DEBONDING LEADING EDGE	2782	5/14/97 CA970530009
(CAN) NEW LEADING EDGE INSTALLED PER MDHS NOTICE 187 PT.II .. LEADING EDGE STRIP FOUND STARTING TO DELAMINATE 18 CMS FROM TIP AND 3 CM TOWARD ROOT. BLADE FLOWN 111.4 HOURS AFTER REPAIR.									
7210		HUGHES 369D	ALLSN 250C20B		ALLISON 6894171	GEARBOX 6894171	CONTAMINATION ENGINE	10762 2341	8/20/97 CA971113040
(CAN) SCAVENGE OIL SYSTEM FAILURE. POSSIBLY MAKING METAL, REPLACED.									
7230		HUGHES 369D	ALLSN 250C20B			COMPRESSOR 6890550	LEAKING ENGINE	6579 3034	12/9/96 CA970421058
(CAN) COMPRESSOR DISCHARGE AIR LEAKING BETWEEN COMPRESSOR SCROLL DISCHARGE AND STEEL INSERTS. PART TC: 1,665.									
7250		HUGHES 369D	ALLSN 250C20B			PLATE 23053320	WARPED NR 8 BRG		5/7/97 14 CA970528016
(CAN) BOTH THE NR 8 BEARING OIL NOZZLE AND EXTERNAL LEAKED ON INSTALLATION OF TURBINE. BOTH CRUSH WASHERS CHANGED. NR 8 BEARING STOPPED LEAKING, BUT EXTERNAL SUMP BECAME PROGRESSIVELY WORSE. WARPED SUMP MOUNTING PLATE CAUSED PROBLEM.									
7250		HUGHES 369D	ALLSN 250C20B		ALLSN 6898735	TURBINE 6898735	SEIZED ENGINE	10440 1	10/18/97 CA971113038
(CAN) TURBINE WOULD SEIZE ON START, WOULD BREAK LOOSE AFTER COOL DOWN, BUT GRINDING NOISE FROM TURBINE PERSISTS. SOUNDS LIKE BLADE RUB. REPLACED.									
7310		HUGHES 369D	ALLSN 250C20B		ALLISON 6895171	VALVE 6895171	LEAKING ENG FUEL		10/30/97 CA971113059
(CAN) WHEN START PUMP TURNED ON, CHECK VALVE LEAKS. VALVE REPLACED.									
5330		KAMAN K1200				SKIN K931460015	CRACKED LT BS 183	2322	4/22/97 CA970430001
(CAN) FUSELAGE SKIN AT STA 183.0, LBL 24.75 - 28.0 FOUND CRACKED. THE CRACK APPEARS TO HAVE ORIGINATED ON THE LEFT HAND EDGE OF THE SKIN AND PROPAGATED INBOARD CLEAR OF THE LONGTITUDINAL AND LATERAL FLANGE ANGLES. NO EVIDENCE OF MECHANICAL DAMAGE OR CORROSION EVIDENT. AIRCRAFT TT: 2,322 HOURS.									
6220		ROBSIN R22BETA				BEARINGS A1541	WORN MAST/HUB	1708	3/16/97 CA970408013
(CAN) VIBRATION REPORTED. ROTOR HEAD DISMANTLED. AT THE ATTACHMENT POINT OF THE HUB TO THE MAST, THE BEARINGS (A-106-5 AND A-648-1) AS WELL AS THE RINGS (A-152-1) WERE EXCESSIVELY WORN. THE TWO BEARINGS (A-648-1) WERE OUT OF ROUND TO THE EXTENT OF DAMAGING THE M/R HUB (A-154-1) BEYOND REPAIR.									
7160		ROBSIN R22BETA	LYC O320B2C			CABLE A5222	BROKEN CARB HEAT		5/5/97 CA970514001
(CAN) PILOT COULD NOT ADJUST CARBURETOR HEAT OUT OF YELLOW ZONE. CABLE BROKEN.									
6300		ROBSIN R44	LYC O540F1B5			FANSHAFT COO75	FRETTING TAPERED SHAFT	400	4/16/96 CA970422023
(CAN) FANWHEEL REMOVED FOR OTHER MAINTENANCE. FRETTING AND METAL TRANSFER NOTICED BETWEEN THE FANSHAFT AND FANWHEEL.									
6300		ROBSIN R44	LYC O540F1B5			BEARING ASSY C0075	FRETTED TAPERED SHAFT	286	4/16/97 CA970422025
(CAN) FANWHEEL REMOVED FOR OTHER MAINTENANCE. FRETTING AND METAL TRANSFER WERE NOTED BETWEEN FANSHAFT AND FANWHEEL.									

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6300		ROBSIN R44				SWITCH V31001	FAILED BELT TENSION	300	4/15/97 CA970507011
(CAN) PILOT HEARD HUMMING NOISE AND LIGHT VIBRATION. CARRIED OUT AN EMERGENCY LANDING, 30 FEET OFF GROUND HEARD LOUD BANG AND LOST DIRECTIONAL CONTROL. AFTER INVESTIGATING, FOUND CLUTCH SHAFT FAILURE DUE TO SWITCH FAILURE ALLOWING BELT TENSION ACTUATOR TO OVER TENSION THE V-BELTS. ROBINSON ISSUED SB R44SB- 21									
6310		ROBSIN R44	LYC O540F1B5		C0511	SPRING A51423	FAILED SPRAG CLUTCH	36	12/11/97 CA971221016
(CAN) REF: RSB 21 AND FAA AD 97-16-02 SPRING ASSY, WOULD NOT TRIP THE STOPPING OF THE ACTUATOR ON THE LEFT SIDE. SWITCH V3-1001 WAS OK AND HAD BEEN DONE AT 497 HOURS AND WAS OK.									
6310		ROBSIN R44	LYC O540F1B5			CLUTCH C0181	BROKEN SPRAG	299	4/14/97 CA970422024
(CAN) GROWLING NOISE ON SHUTDOWN, CLUTCH SHAFT WAS REMOVED AND DIS- ASSEMBLED. BROKEN EAR ON SPRAG CLUTCH.									
5610		SKRSKY S61N				WINDSHIELD R2034183	CRACKED LEFT SIDE	15544	4/14/97 CA970422020
(CAN) UPON DAILY COCKPIT CHECK, WINDSHIELD HEAT INITIATED ON LOW. PILOT WENT TO NORMAL HEAT SELECTION. ACRID SMELL PRESENT IN COCKPIT. MAINTENANCE FOUND WINDSHIELD CRACKED AND SEVERLY BURNED AT THE INNER MID-SECTION. WINDSHIELD AND WINDSHIELD TEMP CONTROL UNIT REPLACED.									
6210		SKRSKY S61N				BLADE S61117020201067	CRACKED CUFF ATTACHMENT	4233	4/10/97 CA970521002
(CAN) IN FLIGHT BIM INDICATION. BLADE REMOVED, SENT OUT FOR REPAIR. CRACK FOUND STARTING FROM CUFF ATTACHMENT BOLT HOLES.									
5313		SKRSKY S76A	TMECA ARRIEL1S1			LONGERON 7620204001107	CRACKED BS 480	2860	10/16/97 CA971027001
(CAN) LONGERON CRACKED IN TWO LOCATIONS AT STN 480 LEFT AND RIGHT. REPAIRED. AIRCRAFT TT: 2,795 HOURS.									
7261		SKRSKY S76A	ALLSN 250C30S			THERMOSTAT 28E251	FAILED NR 1 ENG OIL		4/23/97 CA970501001
(CAN) ENGINE OIL TEMP HIGH IN CRUISE ON NR 1 ENGINE. ALL OTHER PARIMETERS NORMAL. POSSIBLE INDICATION PROBLEM BUT 10 MINUTES LATER, OIL PRESSURE WAS FLUCTUATING. AIRCRAFT RETURNED. OIL TEMP THERMOSTAT STUCK CLOSED. REPLACED.									
7314		SKRSKY S76A	ALLSN 250C30S		TRW 6896810	SPLINES	WORN FUEL PUMP	2522	9/8/97 CA970916019
(CAN) FUEL PUMP SPLINE SHAFT END WORN. REPLACED.									
7320		SKRSKY S76A	TMECA ARRIEL1S		TURBOMECA 1S1	LINE 0301037290	CRACKED P2 AIR LINE	2176	11/6/97 CA971114002
(CAN) P2 AIR LINE CRACKED AT B-NUT WHERE IT ATTACHES TO THE FITTING AT THE COMPRESSOR DISCHARGE. REPLACED. PART TC: 2,655.									
2500		SNIAS AS350B				MIRROR	FAILED ARM		5/22/97 CA970528024
(CAN) MIRROR MOUNT BROKE OFF WHERE UPPER ARM TRANSITIONS FROM TUBE TO FLATTENED AREA FOR BOLTING TO UPPER BRACKET. THIS IS COMPANY BUILT FIXTURE.									
2820		SNIAS AS350BA	TMECA ARRIEL1B		TURBOMECA 0174708010	VALVE 0174708010	LEAKING ENG START DRAIN		9/12/97 CA971015049
(CAN) START DRAIN VALVE FAILED FUNCTIONAL CHEAK. LEAKS SMALL AMOUNT OF FUEL BACK TO TANK WHEN ENGINE AT BOTH IDLE AND FULL THROTTLE. REPLACED.									

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2821		SNIAS AS350D				FILTER 430112302	DAMAGED HIGH PRESSURE		2/18/97 139 CA970226009
(CAN) FILTER BY-PASS LIGHT ON. FAULT TRACED TO DAMAGED HIGH PRESSURE FUEL FILTER. FUEL CONTROL UNIT ALSO REPLACED BECAUSE OF CONTAMINATION.									
2822		SNIAS AS350B	TMECA ARRIEL1B			BOOST PUMP P94812203C	FAILED FUEL SYS		3/14/97 874 CA970421048
(CAN)BOOST PUMP INTERNAL FAILURE PRODUCING ALUMINUM FILINGS IN AIRFRAME FUEL FILTER.									
2842		SNIAS AS350BA	TMECA ARRIEL1B			TRANSMITTER 647510032	STICKING FUEL SENSOR		2/7/97 CA970421054
(CAN) FLOAT STUCK AT 30 PERCENT. AFTER DEFUELING, TAPPING UNIT CAUSED FLOAT TO FALL IN SMALL INCREMENTS. UNIT REPLACED.									
2842		SNIAS AS350BA	TMECA ARRIEL1B			TRANSMITTER 647510033	STICKING FUEL SYS		2/10/97 3 CA970421053
(CAN) FLOAT STICKING AT 20-40 PERCENT RANGE. AFTER DEFUELING, INDICATOR STUCK AT 25 PERCENT. COVER REMOVED, MAGNETIC ARMATURE ROTATED BY HAND. FLOAT HEARD TO DROP AND GAUGE RETURNED TO ZERO. TRANSMITTER REPLACED.									
2910		SNIAS AS350BA	TMECA ARRIEL1B			BELT 704A33690004	SLIPPING HYD PUMP	277	9/29/97 CA971007003
(CAN) LOSS OF HYDRAULICS ON CLIMB OUT. PILOT CUT OFF HYDRAULIC PRESSURE. AIRCRAFT LANDED. HYD BELT LIKELY SLIPPING AS BELT TENSION COULD NOT BE OBTAINED.									
2911		SNIAS AS350B1				ACCUMULATOR 704A34240002	BURST DIAPHRAGM		4/24/97 CA970528023
(CAN) ACCUMULATOR DIAPHRAGM BURST.									
6320		SNIAS AS350B	TMECA ARRIEL1B			CROSSBEAM 350A38021003	CRACKED UNDER MGB		2/7/97 1165 CA970421042
(CAN) INSPECTION PER AD 96-156-071(B) REVEALED CRACK OF BI-DIRECTIONAL CROSSBEAM OF MAIN GEARBOX. PART TC: 5,392.									
6322		SNIAS AS350B	TMECA ARRIEL1B			HOSE 355A75130071	LEAKING LOWER OIL COOL		5/18/97 CA970528026
(CAN) HOSE FROM "T" VALVE TO LOWER OIL COOLER FOUND LEAKING, 12 INCHES FROM OIL COOLER, BEHIND FRONT STRUT.									
6420		SNIAS AS350B2				LAMINATED HINGE 350A33215300	CRACKED TAIL ROTOR	20	4/25/97 CA970505005
(CAN) BLISTERS, CRACKS AND DELAMINATIONS IN BEARING RUBBER MOUNTS CAUSING AN INCREASE IN HIGH FREQUENCY VIBRATION.									
6730		SNIAS AS350BA	TMECA ARRIEL1B		SAMM	SERVO SC5084	FAILED FLT CONTROL	70	9/20/97 CA970930001
(CAN) SERVO CAUSED FEEDBACK FOR FIRST 20 MINUTES OF FLIGHT THEN IS ALRIGHT. OAT 20C.									
7261		SNIAS AS350B	TMECA ARRIEL1B		TURBOMECA 0235237600	CHIP DETECTOR 0235237600	OPEN ENG OIL		4/6/97 CA970528011
(CAN) CHIP DETECTOR INOPERATIVE, OPEN CIRCUIT BETWEEN TIP AND PIN B. REPLACED.									
7322		SNIAS AS350B	TMECA ARRIEL1B		TURBOMECA 0164448390	FCU 0164448390	MALFUNCTION ENGINE		9/21/97 2162 CA971113036
(CAN) PILOT REPORTED THE MAIN ROTOR RPM TO BE FLUCTUATING WITH POWER CHANGES. RPM TESTER INSTALLED AND CONFIRMED RPM DROP TO APPROX 370 RPM, THEN RETURNED TO 380. SLIGHT POWER REDUCTION RPM WOULD INCREASE TO 395-400 RPM, THEN RETURN TO 380-385 RPM. FCU REPLACED.									

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7532		SNIAS AS350B	TMECA ARRIEL1B			BLEED VALVE 9550158260	SHORTED ENGINE		3/4/96 199 CA960503101
(CAN) VALVE FAILED DURING TEST FLIGHT OF NEW TACH BOX. VALVE WOULD NOT CLOSE AT HIGH POWER SETTINGS.									
7600		SNIAS AS350B	TMECA ARRIEL1B		TURBOMECA 0301037950	TUBE 0301037950	CHAFFED P3 AIR LINE		4/28/97 CA970528019
(CAN) P3 AIR LINE CHAFED IN 5 PLACES. REPLACED.									
7712		SNIAS AS350BA	TMECA ARRIEL1B			INDICATOR 3053136	FAILED ENG TORQUE		2/14/97 CA970421047
(CAN) TORQUE INDICATOR INSTALLED IN VERTICAL REFERENCE WINDOW WAS READING 12 PERCENT HIGH WITH ENGINE SHUTDOWN.									
7714		SNIAS AS350B	TMECA ARRIEL1B			TACH BOX 0177555170	SHORTED ENGINE BLEED		12/17/97 2 CA971231004
(CAN) TACH BOX CYCLED BLEED VALVE OPEN AND CLOSED A COUPLE OF TIMES BEFORE STAYING OPEN. THIS HAPPENED SPORADICALLY AND AT LOW ALTITUDE, COULD NOT GET FULL POWER.									
7714		SNIAS AS350B	TMECA ARRIEL1B			TACH BOX 0177555170	SHORTED ENGINE		3/4/96 101 CA960503102
(CAN) SENSOR BOX THAT ACTIVATES ENGINE BLEED VALVE FAILED IN FLIGHT. FAILURE CAUSES BLEED VALVE TO REMAIN OPEN CAUSING REDUCED AVAILABLE ENGINE POWER. FAILURE WAS ACCOMPANIED BY BURNING ELECTRICAL SMELL.									

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES

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7250		AEROSP AS355F1	ALLSN 250C20F			TURBINE ASSY	DAMAGED FIRST STAGE	5328 2293	8/13/96 CA960910039
(CAN) DURING OPERATIONS, THE PILOT HEARD A VIOLENT NOISE FROM HIS RIGHT SIDE. INSTRUMENTS CONFIRMED ENGINE WAS LOST. PILOT PICKED UP AIRSPEED AND WAS ABLE TO CARRY OUT A ONE ENGINE LANDING. PRELIMINARY INVESTIGATION REVEALED SUBSTANTIAL DAMAGE TO THE FIRST STAGE WHEEL AND NOZZLE. PART TC: 6,336.									
7314		BEECH 200BEECH	PWA PT6A41		RG34720A	SCREW B2680	DEFECTIVE FUEL PUMP		3/12/98 AU980289
(AUS) FUEL PUMP SCREWS FAILED TORQUE CHECK IAW ROMEC SB 101SB018.									
7310		BELL 205A1	LYC T5313B			TUBE ASSEMBLY 117050001	BROKEN PURGE SYSTEM		12/28/97 CA980403008
(CAN) TUBE ASSEMBLY, PURGE SYSTEM, FOUND BROKEN AT THE BRAZING. THIS ASSEMBLY IS IN THE FUEL STARTING SYSTEM.									
7210		BELL 206L	ALLSN 250C20			GEARBOX 23035185	SEPARATED STUDS	6481 3355	3/24/98 CA971014007
(CAN) AFTER REMOVING CASEY HEATER SHROUD, THE 4.3125 INCH NUTS WERE REMOVED FROM TURBINE TO GEARBOX, LEAVING TOP .3750 INCH NUT REMAINING. AFTER TAKING WEIGHT OF TURBINE, NOTED HOW LOOSE IT WAS. TURBINE WAS REMOVED BY HAND. THE SHROUD WITH NUT WAS STILL IN THE TURBINE. THE HELICOIL HAD COME OUT OF THE GEARBOX. REPAIRED. TIME SINCE LAST REMOVAL 233 HRS.									
7230		BELL 206B	ALLSN 250C20		6990550	STATOR VANE 6899394	BENT 4TH STAGE		9/18/97 CA971006003
(CAN) COMPRESSOR STALL OCCURRED DURING FLIGHT FOLLOWED BY HIGH T.O.T., POWER REDUCED TO LOWER T.O.T. BELOW RED LINE. ON LANDING, POWER APPLIED TO CHECK DESCENT. INVESTIGATION REVEALED DAMAGE TO STATOR VANE 4TH STAGE.									
7230		BELL 206B	ALLSN 250C20			BOLT 684946812142	CRACKED COMPRESSOR		1/30/97 CA970206015
(CAN) WHILE BUILDING UP AN ENGINE AND INSTALLING A COMPRESSOR, THE BOLT USED TO RETAIN THE COMPRESSOR TO THE GEARBOX. IT WAS A NEW BOLT, BUT UPON CLOSE EXAMINATION USING A GLASS, A CRACK WAS FOUND WHERE THE LANDS CONVERGE.									
7230		BELL 206B	ALLSN 250C20		6876667	RING GROOVES	WORN FRONT SEAL		1/7/98 CA970421038
(CAN) FRONT SEAL RING GROOVES WORN BEYOND LIMITS.									
7230		BELL 206L	ALLSN 250C20B			EXDUCER 6876667	CRACKED COMPRESSOR		7/26/96 CA960801021
(CAN) WHILE DOING A TURBINE CHANGE, AME FOUND A CRACK IN THE COMPRESSOR DISCHARGE TUBE. SUSPECT CRACK WAS CAUSED BY MECHANICAL DAMAGE.									
7230		BELL 206L	ALLSN 250C20		23038126	BEARING 23009609	SPALLING COMPRESSOR		9/9/97 CA970916016
(CAN) CHIP LIGHT IN FLIGHT. A/C LANDED. METAL ON PLUG. SEVERAL RUNUPS AND METAL ON PLUGS. COMPRESSOR CHANGED. NR 1 BEARING ROLLERS HAD SPALLING ON END. BEARING AND SEALS REPLACED.									
7240		BELL 206B	ALLSN 250C20		ALLISON 23056130	LINER 23056130	CRACKED COMBUSTER		9/2/97 CA971015047
(CAN) CRACK FOUND IN LIP AREA CUMBUSTOR LINER ALSO MAKING HARD CONTACT WITH NOZZLE AREA.									
7240		BELL 206L1	ALLSN 250C28B			BEARING 6873002	FAILED ENG NR 2	78038 566	10/1/97 CA971021002
(CAN) ENGINE CHIP LIGHT CAME ON DURING APPROACH, LANDED, NR 2 BEARING IN ENGINE GENERATING METAL. PART TC: 7,004.									

***** DENOTES SIGNIFICANT OCCURRENCE

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INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES (cont'd)

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7260		BELL 206B	ALLSN 250C20B		68760300	STUD 68760300	LOOSE ENG ASSORY DRV		2/11/98 CA970421050
(CAN) LOOSE STUD ON ENGINE ACCESSORY DRIVE GEARBOX. REPLACED.									
7261		BELL 206B	ALLSN 250C20		ALLISON 6898734	FITTING 6877896	REVERSED ENG SCAV OIL		10/1/97 89 CA971113042
(CAN) SCAVENGE OIL FITTING LEAKED SINCE OVERHAUL INSTALLATION. OIL FITTING INSTALLED BACKWARDS. FITTING INSTALLED PROPERLY AND NEW SEALS INSTALLED.									
7313		BELL 206B	ALLSN 250C20B		6898735	NOZZLE 6898735	CRACKED ENGINE		2/11/98 CA970421049
(CAN) FUEL NOZZLE CRACKED BEYOND LIMITS. REPLACED.									
7320		BELL 206B	ALLSN 250C20			TUBE 6875630	CRACKED GOV	5443	12/19/97 CA971231008
(CAN) AIR LINE FROM COMPRESSOR SCROLL TO GOVERNOR CRACKED AT FLARE AT SCROLL END. THIS CAUSED ENGINE TO GO TO IDLE.									
7320		BELL 206B	ALLSN 250C20B		BENDIX 252464424	FUEL CONTROL 252464424	DEFECTIVE ADJUSTER		12/17/96 219 CA970528020
(CAN) GROUND IDLE RPM DROPPED TO 57 PERCENT N1 IDLE SPEED. ADJUSTMENT SCREW FOUND TO BE EASY TO ROTATE BY HAND. NO BUILT IN FRICTION FELT. REASON FOR LAST REMOVAL. REPLACED.									
7320		BELL 206B	ALLSN 250C20B		BENDIX 23057344	BYPASS VALVE	STUCK ENG FUEL	2324	12/17/96 CA970528021
(CAN) UNABLE TO ADJUST START CYCLE. COMPRESSOR STALLING AND FAST EXCELLERATION OF N1 RPM NOTED AT 20 PER N1. FUEL PRESSURE WAS NOTED AS HIGH AS +30 PSI. POSSIBLE BYPASS VALVE STUCK OPEN. REPLACED.									
7320		BELL 206B	ALLSN 250C20			LINE 6875632	LEAKING FUEL CONTROL	3407	12/19/97 CA971231009
(CAN) FUEL NOTED DRIPPING FROM THE ENGINE COMPARTMENT OVERBOARD DRAIN. FUEL LINE BETWEEN FUEL CONTROL AND GOVERNOR LEAKING.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE		10/1/97 1826 CA971113051
(CAN) EXTREMELY HOT STARTS, HANGS AT 50-55 PERCENT N1. TRIM ADJUSTMENT LIMITS REACHED WITH NO EFFECT. FUEL CONTROL UNIT REPLACED.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE		10/21/97 1593 CA971113055
(CAN) INSTALLED UNIT STARTS COOL AND SLOW. SUBSEQUENT START AFTER ADJUSTMENT LIGHT-OFF OCCURRED IMMEDIATELY, THROTTLE WAS IN CUTOFF POSITION. START ABORTED WITH FUEL VALVE BEING SELECTED OFF. FUEL FLOW WAS NOTED AT ALL TIMES, EVEN AT CUTOFF POSITION. FUEL CONTROL UNIT REPLACED. PART TC: 1.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILED		9/15/97 2 CA971113050
(CAN) FIRST START OF DAY IS LONG AND COOL, IDLE IS INCONSISTENT. COULD NOT ADJUST TO CORRECT. FUEL CONTROL UNIT REPLACED.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE		10/1/97 2 CA971113049
(CAN) SLOW COOL, INTERMITTENT HUNG STARTS, IDLE INCONSISTENT, TRIM ADJUSTMENT LIMITS REACHED WITH NO EFFECT. FUEL CONTROL UNIT REPLACED.									
7322		BELL 206B	ALLSN 250C20		CHNDLREVANS 23034702	FUEL CONTRL UNIT 23034702	FAILURE ENGINE		10/1/97 1216 CA971113043
(CAN) SLOW STAGNATED STARTS. THROTTLE ADVANCE NECESSARY TO ACHIEVE GROUND IDLE. FUEL CONTROL UNIT REPLACED.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES (cont'd)

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7322		BELL 206B	ALLSN 250C20		CECO 23034702	FCU 23034702	ERRATIC ENGINE	72	9/13/97 CA971015050
(CAN) FUEL CONTROL THROTTLE RESPONSE ERRATIC AFTER IDLE. NO RESPONSE TO ADJUSTMENTS. REPLACED.									
7323		BELL 206B	ALLSN 250C20			GOVERNOR 23006259	OVERSPEED ENGINE	546	3/18/97 CA970528018
(CAN) ENGINE OVERSPEEDS AND GOVERNOR WILL NOT RECOVER. PART TC: 9,362.									
7420		BELL 206B	ALLSN 250C20B			LEAD 6870855	STRIPPED THREADS		2/11/98 CA970421051
(CAN) STRIPPED THREADS ON LEAD CONNECTOR, CORROSION MAY BE CAUSE. REPLACED.									
7420		BELL 206B	ALLSN 250C20B		UNISON 106149501	EXCITER 106149501	STRIPPED ENG IGN	8346	2/11/98 CA970421052
(CAN) STRIPPED THREADS ON CONNECTIONS, POSSIBLY CORROSION. REPLACED.									
7530		BELL 206B	ALLSN 250C20			TUBE 6876294B	FAILED BLEED SENSE	15	9/18/97 CA970926003
(CAN) BLEED AIR SENSE TUBE FOUND BROKEN. 15 HOURS LATER, SENSE LINE BROKE AGAIN. 25 HOURS LATER ANOTHER LINE INSTALLED. SUBMITTER SUSPECTS THAT WHEN COMPRESSOR WAS CHANGED, IT WAS SHIMMED WRONG OR THE COMPRESSOR HAD A VIBRATION CAUSING LINE TO BREAK.									
7230		BELL 412	PWA PT6T3B			COMPRESSOR	DAMAGED LT ENGINE		2/21/98 AU980231
(AUS) LT ENGINE COMPRESSOR DAMAGED.									
8520		BELL 47G3B1	LYC VO435A1F			STUD	FAILED ENG NR 5 CYL		3/3/98 AU980259
(AUS) NR 5 CYLINDER HOLD DOWN STUDS FAILED.									
8530		CESSNA 150G	CONT O200A			CYLINDER 653426A13	WORN EXH VALVES		3/24/98 AU980325
(AUS) ENGINE CYLINDERS HAD LOW COMPRESSION. INVESTIGATION FOUND WORN EXHAUST VALVE GUIDES AND GLAZED AND OUT OF ROUND CYLINDER BORES.									
8530		CESSNA R172K	CONT IO360K			CYLINDER	FAILED ROCKER PAD	468	2/18/98 AU980209
(AUS) RT FRONT CYLINDER HEAD SEPARATED AT ROCKER BOLT DOWN PAD.									
8530		CESSNA R172K	CONT IO360K			CYLINDER	SEPARATED RT AFT HEAD	478	2/22/98 AU980210
(AUS) RT REAR CYLINDER HEAD SEPARATED.									
7322		CESSNA 180G	CONT O470R		MARVELSCHEB MA45	FLOAT 30764	BROKEN CARB		12/30/97 CA980113003
(CAN) FUEL DRIPPING HEAVILY FROM CARBURETOR AFTER ENGINE SHUTDOWN. CARBURETOR REMOVED AND DISASSEMBLED. CARBURETOR FLOAT PONTOON SEPARATED FROM STRUCTURE, IT APPEARS BOTH SUPPORT TANGS RADII ARE TOO SMALL WHICH LEADS TO FAILURE FIRST, LOADING THE SOLDER JOINT TO FAILURE.									
7414		CESSNA 210N	CONT IO520L			MAGNETO 6210	FAULTY LT MAG		2/18/98 AU980324
(AUS) LT MAGNETO FAULTY.									

***** DENOTES SIGNIFICANT OCCURRENCE

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8520		CESSNA 337F	CONT IO360C			STUD 6419441048	SHEARED NR 4&5 CYL		2/23/98 AU980255
(AUS) CRANKCASE LOWER THOUGH BOLT LOCATED BETWEEN NR 4 AND NR 5 CYLINDERS SHEARED OFF AT THE THREAD.									
8520		CESSNA 402A	CONT TSIO520E			CRANKCASE 643202	CRACKED NR 5 CYL PAD		3/6/98 AU980232
(AUS) CRANKCASE CRACKED AT NR 5 CYLINDER MOUNTING PAD. BOTTOM TWO MOUNT STUDS BROKEN.									
8540		CESSNA 404CESSNA	CONT GTSIO520M			BEARING 537721	FAILED ENG STARTER	1069	3/4/98 AU980309
(AUS) STARTER SHAFT BEARING FAILED. METAL CONTAMINATION OF OIL SYSTEM.									
7314		CESSNA 441	GARRTT TPE33110			FUEL PUMP 8973809	FAILED ENGINE		9/7/97 CA971222002
(CAN) ENGINE WOULD NOT LIGHT UP DURING START UNTIL 18 PERCENT-20 PERCENT. A NORMAL START LIGHT OFF IS 12 PERCENT-14 PERCENT. FOUND FUEL PUMP OUTPUT PRESSURE AT LOW RPM BELOW SPECS.									
7510		CESSNA 550	PWA JT15D4			FLANGE 555225055	CRACKED ENG INLET	2233	10/6/97 CA971010005
(CAN) BOTH ENGINE INLETS CRACKED IN THE RADIUS OF THE COWL ATTACH FLANGE ABOUT 5 INCHES LONG. REPAIRED. PART TC: 2,837.									
8530		DHAV DHC2EVANS	PWA R985AN14B			VALVE GUIDE 8408	LOOSE NR 1 CYL EXH	269	2/25/98 AU980214
(AUS) NR 1 CYLINDER EXHAUST VALVE GUIDE LOOSE.									
8530		DHAV DHC3	PWA R134059			CYLINDER 366249	DEFECTIVE NR 2 - 3 CYL EXH	10	3/3/98 AU980291
(AUS) NR 2 AND NR 3 CYLINDERS LEAKING PAST EXHAUST VALVES.									
8530		DHAV DHC3	PWA R134059		R134059	CYLINDER 366249	LEAKING NR 1 CYL	10	3/3/98 AU980292
(AUS) NR 1 CYLINDER LEAKING BETWEEN CYLINDER AND BARREL.									
7261		ENSTRM ENSTROM480	ALLSN 250C20			SHAFT 41291023	CRACKED OIL COOLER	33	3/19/98 CA970513023
(CAN) IN-FLIGHT FAILURE OF OIL COOLER CONNECTING SHAFT.									
7210		HUGHES 369D	ALLSN 250C20B		ALLISON 6894171	GEARBOX 6894171	CONTAMINATION ENGINE	10762 2341	8/20/97 CA971113040
(CAN) SCAVENGE OIL SYSTEM FAILURE. POSSIBLY MAKING METAL, REPLACED.									
7230		HUGHES 369D	ALLSN 250C20B		6890550	COMPRESSOR 6890550	LEAKING ENGINE	6579 3034	12/9/96 CA970421058
(CAN) COMPRESSOR DISCHARGE AIR LEAKING BETWEEN COMPRESSOR SCROLL DISCHARGE AND STEEL INSERTS. PART TC: 1,665.									
7250		HUGHES 369D	ALLSN 250C20B		23053320	PLATE	WARPED NR 8 BRG	14	5/7/97 CA970528016
(CAN) BOTH THE NR 8 BEARING OIL NOZZLE AND EXTERNAL LEAKED ON INSTALLATION OF TURBINE. BOTH CRUSH WASHERS CHANGED. NR 8 BEARING STOPPED LEAKING, BUT EXTERNAL SUMP BECAME PROGRESSIVELY WORSE. WARPED SUMP MOUNTING PLATE CAUSED PROBLEM.									

***** DENOTES SIGNIFICANT OCCURRENCE

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES (cont'd)

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7250		HUGHES 369D	ALLSN 250C20B		ALLSN 6898735	TURBINE 6898735	SEIZED ENGINE	10440 1	10/18/97 CA971113038
(CAN) TURBINE WOULD SEIZE ON START, WOULD BREAK LOOSE AFTER COOL DOWN, BUT GRINDING NOISE FROM TURBINE PERSISTS. SOUNDS LIKE BLADE RUB. REPLACED.									
7310		HUGHES 369D	ALLSN 250C20B		ALLISON 6895171	VALVE 6895171	LEAKING ENG FUEL		10/30/97 CA971113059
(CAN) WHEN START PUMP TURNED ON, CHECK VALVE LEAKS. VALVE REPLACED.									
7210		MTSBSI MU2B35	GARRTT TPE3316			BULL GEAR 8937394	FAILED GR BOX		2/21/97 CA970226002
*****	(CAN) DURING CRUISE, THE RIGHT HAND ENGINE SUDDENLY FEATHERED. ENGINE SECURED. INSPECTION FOUND THAT THE BULL GEAR HAD FAILED EITHER IN THE GEAR TOOTH BASE AND/OR THE WEB DISK OR THE DISK RADIUS. COULD HAVE BEEN CAUSED BY FOREIGN OBJECT ENTERING THE GEAR MESH AREA. DAMAGE TO GEAR CAUSED LOSS OF ALL TEETH ON THE HIGH SPEED PINION AND LOSS OF DRIVE FROM THE POWER GROUP TO THE PROP, AS WELL AS DESTRUCTION OF THE SCAVENGE PUMP. DAMAGE CONFINED MAINLY TO THE DIAPHRAGM ASSEMBLY AND THE GEARBOX.								
7230		MTSBSI MU2B36A	GARRTT TPE3315			IMPELLER 8962233	CRACKED 1ST STAGE	9084 2984	9/10/97 CA970918006
(CAN) DURING HSI GBI, THE COMPRESSOR SECTION WAS DISMANTLED DUE TO COMPRESSOR RUB. 1ST STAGE IMPELLER HAS A CRACK IN IT. THIS PN IS REFERENCED IN SB TPE331A72-0971. REPLACED. PART TC: 11,482 HOURS.									
7261		MTSBSI MU2B36	GARRTT TPE3316			GASKET 8650914	FAILED LT ENG SCAV	70	10/24/97 CA971113013
(CAN) DURING CRUISE, CREW NOTICED FLUCTUATING OIL PRESSURE ON LT ENGINE. OIL PRESSURE MONITORED AND AIRCRAFT LANDED. FRETTEED AND DETERIORATED TURBINE SCAVENGE PUMP GASKET CAUSING OIL LOSS IN THE ENGINE. NEW SEAL INSTALLED.									
8520		PIPER PA31350	LYC TIO540J2BD			TAPPET	FAILED NR 4 CYL CAM		2/28/98 AU980217
(AUS) LT ENGINE CRANKCASE HOLED IN AREA ADJACENT TO NR 4 CYLINDER INLET CAM FOLLOWER. CAM FOLLOWER HEAD MISSING. NR 3 CYLINDER CAM FOLLOWER ALSO DAMAGED.									
8530		PIPER PA31	LYC TIO540A2C			CYLINDER L347561A	FAILED LT ENG NR 1 CYL		3/21/98 AU980329
(AUS) LT ENGINE NR 1 CYLINDER FAILED. METAL CONTAMINATION OF OIL SYSTEM.									
8540		PIPER PA31350	LYC LTIO540J2BD			GEAR LW10297	FAILED CRANK IDLER		3/2/98 AU980298
(AUS) CRANKSHAFT IDLER GEAR TEETH FAILED. DAMAGE TO CAMSHAFT GEAR AND CRANKSHAFT GEAR. LOSS OF DRIVE TO OIL PUMP AND MAGNETO.									
8550		PIPER PA31350	LYC TIO540J2BD			FILTER	CONTAMINATED ENG OIL		3/16/98 AU980275
(AUS) ENGINE OIL FILTER CONTAMINATED WITH METAL.									
7210		PIPER PA42	PWA PT6A41			GEAR	FAILED RT ENG RED GRBOX		2/11/98 AU980220
(AUS) RT ENGINE REDUCTION GEARBOX PLANETARY GEAR FAILURE. METAL CONTAMINATION OF GEARBOX. GEARBOX DECOUPLED FROM POWER TURBINE. SECOND STAGE TURBINE SHED ALL BLADES CAUSING INTERNAL DAMAGE.									
7250		PIPER PA42	PWA PT6A41			ENGINE	FAILED TURBINE SECTION		2/11/98 AU980283
(AUS) ENGINE POWER SECTION FAILED.									

***** DENOTES SIGNIFICANT OCCURRENCE

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7261		SKRSKY S76A	ALLSN 250C30S			THERMOSTAT 28E251	FAILED NR 1 ENG OIL		4/23/97 CA970501001
(CAN) ENGINE OIL TEMP HIGH IN CRUISE ON NR 1 ENGINE. ALL OTHER PARIMETERS NORMAL. POSSIBLE INDICATION PROBLEM BUT 10 MINUTES LATER, OIL PRESSURE WAS FLUCTUATING. AIRCRAFT RETURNED. OIL TEMP THERMOSTAT STUCK CLOSED. REPLACED.									
7314		SKRSKY S76A	ALLSN 250C30S		TRW 6896810	SPLINES	WORN FUEL PUMP	2522	9/8/97 CA970916019
(CAN) FUEL PUMP SPLINE SHAFT END WORN. REPLACED.									
7320		SKRSKY S76A	TMECA ARRIEL1S		TURBOMECA 1S1	LINE 0301037290	CRACKED P2 AIR LINE	2176	11/6/97 CA971114002
(CAN) P2 AIR LINE CRACKED AT B-NUT WHERE IT ATTACHES TO THE FITTING AT THE COMPRESSOR DISCHARGE. REPLACED. PART TC: 2,655.									
7261		SNIAS AS350B	TMECA ARRIEL1B		TURBOMECA 0235237600	CHIP DETECTOR 0235237600	OPEN ENG OIL		4/6/97 CA970528011
(CAN) CHIP DETECTOR INOPERATIVE, OPEN CIRCUIT BETWEEN TIP AND PIN B. REPLACED.									
7322		SNIAS AS350B	TMECA ARRIEL1B		TURBOMECA 0164448390	FCU 0164448390	MALFUNCTION ENGINE		9/21/97 2162 CA971113036
(CAN) PILOT REPORTED THE MAIN ROTOR RPM TO BE FLUCTUATING WITH POWER CHANGES. RPM TESTER INSTALLED AND CONFIRMED RPM DROP TO APPROX 370 RPM, THEN RETURNED TO 380. SLIGHT POWER REDUCTION RPM WOULD INCREASE TO 395-400 RPM, THEN RETURN TO 380-385 RPM. FCU REPLACED.									
7532		SNIAS AS350B	TMECA ARRIEL1B			BLEED VALVE 9550158260	SHORTED ENGINE		3/4/96 199 CA960503101
(CAN) VALVE FAILED DURING TEST FLIGHT OF NEW TACH BOX. VALVE WOULD NOT CLOSE AT HIGH POWER SETTINGS.									
(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES)									

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS**4/12/98 - 4/18/98 ISSUE: 98-16 ZAC-327**

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3416		AYRES S2RT15NORMAL				ALTIMETER 5934	FRICTION COCKPIT		3/5/98 AU980295
(AUS) ALTIMETER FAILED AD/INST/8 AMDT3. EXCESSIVE FRICTION TRAVELLING UP AND DOWN SCALE.									
3424		AYRES S2RT15NORMAL				INDICATOR 5224TC	FAILED TURN & BANK		3/19/98 AU980296
(AUS) TURN AND SLIP INDICATOR FAULTY. INDICATOR ROTOR WAS NOT SPINNING. INSTRUMENT FAILED AD/INST/8 AMDT 3.									
3452		CESSNA 172N			RT395A	RESISTOR 3420221	BURNT TRANSPONDER		12/15/97 CA980113004
(CAN) SMOKE IN COCKPIT. TRANSPONDER FOUND TO HAVE BURNT DIMMING RESISTOR. REPAIRED AND CERTIFIED.									
2562		PARTEN P68B			ELT1104	BATTERY 4520130	LEAKING EMERG LOCATOR		2/26/98 AU980225
(AUS) ELT BATTERY ACID SPILLAGE. ACID ATE THROUGH THE BATTERY CASE AND BATTERY MOUNTING PLATE.									
2562		PIPER PA32300			E01	BATTERY 9184	LEAKING EMERG LOCATOR		2/9/98 AU980326
(AUS) ELT BATTERIES LEAKING. BATTERIES WERE DURACELL MN1300 TYPE MADE IN THE USA.									
(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS)									

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6114		CESSNA U206G	CONT IO520F	MCAULY D3A32C90		HUB C90	CRACKED PROPELLER		3/24/98 AU980333
(AUS) PROPELLER HUB CRACKED ON FLANGE AREA. INVESTIGATION ALSO FOUND THAT ALL THREE BLADE SOCKETS WERE FILLED WITH 'SILASTIC' SEALANT. PERSONNEL/MAINTENANCE ERROR.									
6110		PIPER PA28180		SNSNCH 76EM8S5		BLADE	DAMAGED PROP LE & FACE	1175	12/30/97 CA980403009
(CAN) PROPELLER RECEIVED FOR CORROSION INSPECTION. CORROSION FOUND ON FACE SIDE OF THE BLADES ACCOMPANIED BY STONE DAMAGE.									

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS)



U.S. Department
of Transportation
**Federal Aviation
Administration**

SERVICE DIFFICULTY REPORT SUMMARY

GENERAL AVIATION - INDEX



The following information provides a tally of the Service Difficulty Reports (SDR's) contained in this weeks issue of the General Aviation SDR Summary. The totals represent only a summation of the SDR's that were submitted to the FAA, Aviation Data Systems Branch, AFS-620, and processed in time for inclusion in the Summary. The first table is a tally of the number of SDR's submitted through the indicated Flight Standards District Office (FSDO). The second table sorts the SDR's by the aircraft or equipment make and model. The heading at the top of each table provides a two digit Joint Aircraft System/Component (JASC) code grouping (e.g., JASC codes 1100 thru 1800 are represented by the heading labeled 11-18) which categorizes in general, the problem areas for each reported discrepancy.

The Flight Standards Service Difficulty Program objective is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products. This is accomplished by the collection of Service Difficulty and Malfunction or Defect Reports. SDR's are consolidation and collation into common data base where they are analyzed for trends, problems, and alert information. This information is then disseminated to the appropriate segments of the aviation community and to other FAA offices.

The number of SDR's submitted is not an indicator of the mechanical reliability or fitness of an air carrier's aircraft fleet and should not be used as such. The air carriers certificate holding office has the primary responsibility for planning, programming evaluations, and assessing the performance of operators. Questions regarding an air carrier's fleet performance should be directed to the appropriate Flight Standards District Office, Certificate Management Office, or Certificate Management Unit.

GENERAL AVIATION SUMMARY INDEX BY DISTRICT OFFICE**4/12/98 To 4/18/98 ISSUE: 98-16 ZAC-327**

DISTRICT OFFICE	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								TOTAL
	11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	
AU S	0	19	15	0	16	8	5	14	77
CA	0	28	34	0	37	30	64	0	193
CE 01	0	0	0	0	0	0	0	1	1
EA 03	0	1	0	0	0	2	0	0	3
EA 13	0	0	1	0	0	1	1	0	3
EA 25	0	1	0	0	2	0	0	0	3
GL 01	0	0	0	0	0	0	1	0	1
GL 03	0	0	0	0	0	0	0	1	1
GL 15	0	0	1	0	0	0	0	0	1
GL 19	0	0	0	0	0	1	0	0	1
GL 21	0	1	0	0	0	2	1	0	4
GL 25	0	0	0	0	0	0	1	0	1
NE 03	0	0	0	0	0	1	0	0	1
NE 05	0	1	0	0	1	0	0	0	2
NM 01	0	0	0	0	0	1	0	0	1
NM 07	0	0	0	0	0	0	0	1	1
NM 08	0	0	0	0	0	0	2	0	2
NM 09	0	0	0	0	0	1	0	0	1
NM 11	0	0	2	0	0	0	3	0	5
SO 15	0	1	0	0	0	0	0	1	2
SW 01	0	1	0	0	0	0	0	0	1
SW 03	0	50	46	0	5	37	35	0	173
SW 05	0	7	4	0	0	4	1	0	16
SW 15	0	0	0	0	0	0	0	1	1
SW 99	0	0	1	0	1	0	0	0	2
WP 01	0	0	0	0	1	0	0	0	1

DISTRICT OFFICE	11-18	21-29	SDR TOTALS BY FAA ATA SYSTEM CHAPTER				71-79	80-85	TOTAL
			30-38	45-49	51-57	61-67			
WP 07	0	0	0	0	2	0	0	1	3
WP 09	0	0	1	0	0	0	0	0	1
WP 19	0	0	1	0	0	0	1	0	2
WP 23	0	0	0	0	0	0	1	0	1
TOTALS	0	110	106	0	65	88	116	20	505

(End of GENERAL AVIATION SUMMARY INDEX by DISTRICT OFFICE Report)

GENERAL AVIATION SUMMARY INDEX by MANUFACTURER MAKE and MODEL**4/12/98 To 4/18/98 ISSUE: 98-16 ZAC-327**

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								TOTAL
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	
AEROSP	AS355F1	0	1	0	0	0	0	1	0	2
AEROSP	SA365C	0	1	0	0	0	0	0	0	1
AIRTRC	AT502	0	1	0	0	0	0	0	0	1
AIRTRC	AT802	0	0	1	0	0	0	0	0	1
AMTRWG	WAGARO	0	0	0	0	0	1	0	0	1
AYRES	S2RT15NORMAL	0	0	2	0	1	0	0	0	3
BEECH	100BEECH	0	0	0	0	1	0	0	0	1
BEECH	200BEECH	0	6	7	0	0	0	1	0	14
BEECH	58	0	1	0	0	2	0	0	0	3
BEECH	65A90	0	1	2	0	0	0	0	0	3
BEECH	65B80	0	0	1	0	0	0	0	0	1
BEECH	76	0	0	1	0	0	0	0	0	1
BEECH	95B55	0	0	0	0	0	0	1	0	1
BEECH	99	0	1	0	0	1	0	0	0	2
BEECH	A100	0	0	2	0	1	0	0	0	3
BEECH	A23	0	0	0	0	1	0	0	0	1
BEECH	B100	0	0	0	0	1	0	0	0	1
BEECH	B200C	0	2	0	0	2	0	0	0	4
BEECH	C90	0	0	1	0	0	0	0	0	1
BEECH	D55	0	1	1	0	0	0	0	0	2
BEECH	F33A	0	0	1	0	0	0	0	0	1
BELL	204B	0	0	0	0	0	1	0	0	1
BELL	205A1	0	0	0	0	1	0	1	0	2
BELL	206B	0	2	1	0	7	10	26	0	46
BELL	206B3	0	0	1	0	0	1	1	0	3
BELL	206L	0	0	1	0	0	0	3	0	4
BELL	206L1	0	6	3	0	2	6	9	0	26

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								TOTAL
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	
BELL	206L3	0	1	9	0	1	9	4	0	24
BELL	206L4	0	0	1	0	0	1	0	0	2
BELL	212	0	0	2	0	1	2	3	0	8
BELL	214ST	0	11	3	0	0	4	2	0	20
BELL	230	0	0	0	0	0	1	0	0	1
BELL	407	0	1	0	0	1	3	0	0	5
BELL	412	0	16	12	0	1	7	9	0	45
BELL	47G3B	0	1	0	0	0	5	0	0	6
BELL	47G3B1	0	0	0	0	0	1	0	1	2
BELL	OH58A	0	0	0	0	0	1	0	0	1
BNORM	BN2A21	0	1	0	0	0	0	0	0	1
BOEING	1072	0	0	0	0	0	2	0	0	2
BOLKMS	BK117A1	0	0	0	0	0	1	0	0	1
BOLKMS	BK117A3	0	0	1	0	0	0	0	0	1
BOLKMS	BK117B1	0	3	2	0	0	3	0	0	8
BOLKMS	BK117B2	0	3	0	0	0	0	0	0	3
BOLKMS	BK117C1	0	4	0	0	0	2	0	0	6
BOLKMS	BO105LSA3	0	1	0	0	0	0	0	0	1
BOLKMS	BO105S	0	4	7	0	0	5	7	0	23
CARSON	S61LSKRISKY	0	0	0	0	0	0	4	0	4
CESSNA	150G	0	0	0	0	0	0	1	1	2
CESSNA	152	0	1	0	0	0	0	0	0	1
CESSNA	172N	0	0	2	0	0	0	0	0	2
CESSNA	172P	0	0	0	0	2	0	0	1	3
CESSNA	172R	0	1	0	0	0	0	0	1	2
CESSNA	172RG	0	0	2	0	0	0	0	0	2
CESSNA	175	0	0	0	0	0	0	2	0	2

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								TOTAL
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	
CESSNA	175A	0	0	0	0	0	0	3	0	3
CESSNA	180	0	0	1	0	0	0	0	0	1
CESSNA	180G	0	0	0	0	0	0	1	0	1
CESSNA	182F	0	1	0	0	0	0	0	0	1
CESSNA	182N	0	0	0	0	0	0	1	0	1
CESSNA	210J	0	0	0	0	1	0	0	0	1
CESSNA	210M	0	0	0	0	1	0	0	0	1
CESSNA	210N	0	0	1	0	0	0	1	0	2
CESSNA	337F	0	0	0	0	0	0	0	1	1
CESSNA	402A	0	0	0	0	0	0	0	1	1
CESSNA	402C	0	2	3	0	0	0	0	0	5
CESSNA	404CESSNA	0	0	0	0	1	0	0	1	2
CESSNA	414	0	0	0	0	1	0	0	0	1
CESSNA	414A	0	2	1	0	0	0	0	0	3
CESSNA	421B	0	0	1	0	0	0	0	0	1
CESSNA	421C	0	0	2	0	0	0	0	0	2
CESSNA	441	0	0	2	0	0	0	4	0	6
CESSNA	500CESSNA	0	1	0	0	0	0	0	0	1
CESSNA	525	0	0	0	0	1	0	0	0	1
CESSNA	550	0	0	0	0	6	0	1	0	7
CESSNA	A152	0	0	0	0	1	0	0	0	1
CESSNA	A188B	0	0	0	0	2	0	0	0	2
CESSNA	P210N	0	0	0	0	2	0	0	0	2
CESSNA	R172K	0	0	0	0	0	0	0	2	2
CESSNA	R182	0	1	0	0	0	0	0	0	1
CESSNA	TU206G	0	0	1	0	0	0	0	1	2
CESSNA	U206C	0	0	0	0	1	0	0	0	1

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								TOTAL
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	
CESSNA	U206G	0	0	0	0	0	1	0	0	1
CHILD	S2APITTS	0	1	0	0	0	0	0	1	2
DHAV	DHC2EVANS	0	0	0	0	0	0	0	1	1
DHAV	DHC3	0	0	0	0	1	0	0	2	3
DHAV	DHC6300	0	0	0	0	0	0	1	0	1
DIAMON	DA20A1	0	1	0	0	0	1	1	0	3
DOUG	MD900	0	0	1	0	0	0	0	0	1
EMB	EMB110P1	0	1	1	0	2	0	0	0	4
ENSTRM	ENSTROM480	0	0	0	0	0	1	2	0	3
GROB	G103TWNASTIR	0	0	1	0	0	0	0	0	1
GROB	G115C	0	2	0	0	1	0	0	0	3
GULSTM	690D	0	0	0	0	1	0	0	0	1
GULSTM	695A	0	1	0	0	0	0	0	0	1
HELIO	H250	0	0	0	0	1	0	0	0	1
HUGHES	369C	0	0	0	0	0	1	0	0	1
HUGHES	369D	0	0	0	0	0	2	6	0	8
HUGHES	369E	0	1	0	0	0	1	0	0	2
KAMAN	K1200	0	0	0	0	1	1	0	0	2
LET	L13BLANIK	0	1	0	0	1	0	0	0	2
LUSCOM	8A	0	0	0	0	0	0	0	1	1
MTSBSI	MU2B30	0	1	0	0	0	0	0	0	1
MTSBSI	MU2B35	0	0	0	0	0	0	1	0	1
MTSBSI	MU2B36	0	0	0	0	0	0	1	0	1
MTSBSI	MU2B36A	0	0	1	0	0	0	1	0	2
PARTEN	P68B	0	2	1	0	1	0	0	0	4
PARTEN	P68C	0	1	0	0	1	0	0	0	2
PILATS	PC12	0	0	1	0	0	0	0	0	1

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								TOTAL
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	
PILATS	PC6B1H2	0	1	0	0	0	0	0	0	1
PIPER	PA28151	0	0	1	0	0	0	0	0	1
PIPER	PA28180	0	0	0	0	0	1	0	0	1
PIPER	PA28236	0	0	0	0	0	0	0	1	1
PIPER	PA28R200	0	0	0	0	2	0	0	0	2
PIPER	PA28R201	0	0	0	0	1	0	1	0	2
PIPER	PA31	0	1	2	0	3	0	0	1	7
PIPER	PA31310	0	0	1	0	0	0	0	0	1
PIPER	PA31350	0	1	3	0	4	1	0	3	12
PIPER	PA32300	0	1	0	0	0	0	0	0	1
PIPER	PA42	0	0	0	0	0	0	2	0	2
PIPER	PA44180	0	0	3	0	0	0	1	0	4
REIMS	F406	0	0	1	0	0	0	0	0	1
ROBSIN	R22BETA	0	0	0	0	0	1	1	0	2
ROBSIN	R44	0	0	0	0	0	5	0	0	5
SKRSKY	S61N	0	0	0	0	1	1	0	0	2
SKRSKY	S76A	0	6	11	0	1	1	4	0	23
SNIAS	AS350B	0	2	0	0	0	2	6	0	10
SNIAS	AS350B1	0	1	0	0	0	0	0	0	1
SNIAS	AS350B2	0	1	0	0	0	1	1	0	3
SNIAS	AS350BA	0	4	0	0	0	1	1	0	6
SNIAS	AS350D	0	1	0	0	0	0	0	0	1
ZLIN	Z242L	0	1	0	0	0	0	0	0	1
TOTALS		0	110	106	0	65	88	116	20	505

(End of AIR CARRIER SUMMARY INDEX by OPERATOR Report)

JOINT AIRCRAFT SYSTEM/COMPONENT CODE TABLE

PREFACE

The Joint Aircraft System/Component (JASC) Code Table is a modified version of the Air Transport Association of America (ATA), Specification 100 code. It was developed by the Federal Aviation Administration's (FAA), Aviation Data Systems Branch (AFS-620). Technical support was provided by the Galaxy Scientific Corporation, and various representatives of the air carrier and general aviation community.

Over the past four years, the JASC format of the ATA Spec 100 code has gained widespread industry acceptance. In a harmonized effort, the FAA's counterparts in Australia and Canada have adopted the JASC code with only a few exceptions. Some Canadian aircraft manufacturers have also recently adopted this new standard.

This code table is constructed by using the new JASC four (4) digit code, along with an abbreviated code title. The abbreviated titles have been modified in some cases to clarify the intended use of the accompanying code. This table can be used as a quick reference chart, to assist in the coding and review of aircraft structures or systems data (i.e., Service Difficulty Report (SDR), Accident/Incident Report).

The current coding scheme used in the JASC code was introduced in May 1991, for the technical classification of SDR's. Its predecessor, the FAA aircraft system/component code, was a similar but more complex eight-digit code which was developed over 25 years ago. It was constructed around the computer technology of that period. It consisted of a four digit numerical code plus a four alpha character code to make data retrieval possible. Since that time, computer technology has advanced many fold. Reducing the code from eight to four characters simplifies coding, and in some cases, makes JASC coding match the ATA Specification 100 first three digits, which are used to identify aircraft systems. The ATA code does not reference the fourth digit, so it is free to be used for identifying components.

The JASC code aircraft structural section has increased due to problems inherent with aging aircraft. As an example, FAA code 5301 SXBD was expanded to 20 items due to the high rate of reporting in this area (8021 structural reports were received in 1989). In some instances, there was very little reporting and codes were combined into other systems if the safety impact was not significant. The overall reduction in codes has been from 568 FAA codes to 488 JASC codes, with the significant increase being in the structural area as stated earlier.

The JASC code divides the engine section into two major code groups to separate the turbine and reciprocating engines. The codes for the turbine engines are in JASC Chapter 72, Turbine/Turboprop Engine. The codes for the reciprocating engines are now exclusively found in JASC Chapter 85, Reciprocating Engine.

The other major deviation from ATA Spec 100 is in ATA section 2730, specifically involves the stall warning system. Early technology (primarily on smaller aircraft) directly linked the sensing of flight attitude to one of the components which furnished the means of manually controlling the flight attitude characteristics (elevator). Today, most large transport category aircraft utilize electronic units to sense the change in the environmental condition called stall, and use the data to influence navigation. ATA section 3410, Flight Environment Data, includes high speed warning in its code definition. Stall warning (low speed) is the reciprocal term of high speed warning, so its filing under the same code appears more logical. Thus, with the JASC code it was decided to move the stall warning system to Chapter 34 under the separate code JASC code 3418, Stall Warning System.

The FAA is continuing to pursue worldwide involvement from operators and manufacturers in addressing the need for international standardization of aircraft system/component codes. The ultimate goal is to develop a universal aircraft/component numbering standard which can be used in the manufacturer's maintenance manual, wiring diagram manual, system manuals and illustrated parts catalog. This harmonized standard must be a usable standard for the aircraft manufacturers, air carrier operators and the general aviation community.

We welcome comments and feedback regarding the possible forming of working groups to achieve this long range consideration of possibly harmonizing the ATA Specification 100 code and the JASC code. Comments may be directed to the FAA, Aviation Data Sytem Branch, AFS-620, P.O. Box 25082, Oklahoma City, OK 73125.

JOINT AIRCRAFT SYSTEM/COMPONENT CODE TABLE

JASC/ TITLE

11 PLACARDS AND MARKINGS

1100 PLACARDS AND MARKINGS

12 SERVICING

1210 FUEL SERVICING
1220 OIL SERVICING
1230 HYDRAULIC FLUID SERVICING
1240 COOLANT SERVICING

18 HELICOPTER VIBRATION

1800 HELICOPTER VIB/NOISE ANALYSIS
1810 HELICOPTER VIBRATION ANALYSIS
1820 HELICOPTER NOISE ANALYSIS

21 AIR CONDITIONING

2100 AIR CONDITIONING SYSTEM
2110 CABIN COMPRESSOR SYSTEM
2120 AIR DISTRIBUTION SYSTEM
2121 AIR DISTRIBUTION FAN
2130 CABIN PRESSURE CONTROL SYSTEM
2131 CABIN PRESSURE CONTROLLER
2132 CABIN PRESSURE INDICATOR
2133 PRESSURE REGUL/OUTFLOW VALVE
2134 CABIN PRESSURE SENSOR
2140 HEATING SYSTEM
2150 CABIN COOLING SYSTEM
2160 CABIN TEMPERATURE CONTROL SYSTEM
2161 CABIN TEMPERATURE CONTROLLER
2162 CABIN TEMPERATURE INDICATOR
2163 CABIN TEMPERATURE SENSOR
2170 HUMIDITY CONTROL SYSTEM

22 AUTO FLIGHT

2200 AUTO FLIGHT SYSTEM
2210 AUTOPILOT SYSTEM
2211 AUTOPILOT COMPUTER
2212 ALTITUDE CONTROLLER
2213 FLIGHT CONTROLLER
2214 AUTOPILOT TRIM INDICATOR
2215 AUTOPILOT MAIN SERVO
2216 AUTOPILOT TRIM SERVO
2220 SPEED-ATTITUDE CORRECT. SYSTEM
2230 AUTO THROTTLE SYSTEM
2250 AERODYNAMIC LOAD ALLEVIATING

23 COMMUNICATIONS

2300 COMMUNICATIONS SYSTEM
2310 HF COMMUNICATION SYSTEM
2311 UHF COMMUNICATION SYSTEM
2312 VHF COMMUNICATION SYSTEM
2320 DATA TRANSMISSION AUTO CALL
2330 ENTERTAINMENT SYSTEM
2340 INTERPHONE & PA SYSTEM
2350 AUDIO INTEGRATING SYSTEM
2360 STATIC DISCHARGE SYSTEM
2370 AUDIO/VIDEO MONITORING

24 ELECTRICAL POWER

2400 ELECTRICAL POWER SYSTEM
2410 ALTERNATOR-GENERATOR DRIVE
2420 AC GENERATION SYSTEM
2421 AC GENERATOR-ALTERNATOR
2422 AC INVERTER
2423 PHASE ADAPTER

24 ELECTRICAL POWER CONT'D

2424 AC REGULATOR
2425 AC INDICATING SYSTEM
2430 DC GENERATING SYSTEM
2431 BATTERY OVERHEAT WARN. SYSTEM
2432 BATTERY/CHARGER SYSTEM
2433 DC RECTIFIER-CONVERTER
2434 DC GENERATOR-ALTERNATOR
2435 STARTER-GENERATOR
2436 DC REGULATOR
2437 DC INDICATING SYSTEM
2440 EXTERNAL POWER SYSTEM
2450 AC POWER DISTRIBUTION SYSTEM
2460 DC POWER/DISTRIBUTION SYSTEM

25 EQUIPMENT/FURNISHINGS

2500 CABIN EQUIPMENT/FURNISHINGS
2510 FLIGHT COMPARTMENT EQUIPMENT
2520 PASSENGER COMPARTMENT EQUIPMENT
2530 BUFFET/GALLEYS
2540 LAVATORIES
2550 CARGO COMPARTMENTS
2551 AGRICULTURAL SPRAY SYSTEM
2560 EMERGENCY EQUIPMENT
2561 LIFE JACKET
2562 EMERGENCY LOCATOR BEACON
2563 PARACHUTE
2564 LIFE RAFT
2565 ESCAPE SLIDE
2570 ACCESSORY COMPARTMENT
2571 BATTERY BOX STRUCTURE
2572 ELECTRONIC SHELF SECTION

26 FIRE PROTECTION

2600 FIRE PROTECTION SYSTEM
2610 DETECTION SYSTEM
2611 SMOKE DETECTION
2612 FIRE DETECTION
2613 OVERHEAT DETECTION
2620 EXTINGUISHING SYSTEM
2621 FIRE BOTTLE, FIXED
2622 FIRE BOTTLE, PORTABLE

27 FLIGHT CONTROLS

2700 FLIGHT CONTROL SYSTEM
2701 CONTROL COLUMN SECTION
2710 AILERON CONTROL SYSTEM
2711 AILERON TAB CONTROL SYSTEM
2720 RUDDER CONTROL SYSTEM
2721 RUDDER TAB CONTROL SYSTEM
2722 RUDDER ACTUATOR
2730 ELEVATOR CONTROL SYSTEM
2731 ELEVATOR TAB CONTROL SYSTEM
2740 STABILIZER CONTROL SYSTEM
2741 STABILIZER POSITION INDICATING
2742 STABILIZER ACTUATOR
2750 TE FLAP CONTROL SYSTEM
2751 TE FLAP POSITION IND. SYSTEM
2752 TE FLAP ACTUATOR
2760 DRAG CONTROL SYSTEM
2761 DRAG CONTROL ACTUATOR
2770 GUST LOCK/DAMPER SYSTEM
2780 LE FLAP CONTROL SYSTEM
2781 LE FLAP POSITION IND. SYSTEM
2782 LE FLAP ACTUATOR

28 FUEL

2800 AIRCRAFT FUEL SYSTEM
2810 FUEL STORAGE
2820 ACFT FUEL DISTRIB. SYSTEM
2821 ACFT FUEL FILTER/STRAINER
2822 FUEL BOOST PUMP
2823 FUEL SELECTOR/SHUTOFF VALVE
2824 FUEL TRANSFER VALVE
2830 FUEL DUMP SYSTEM
2840 ACFT FUEL INDICATING
2841 FUEL QUANTITY INDICATOR
2842 FUEL QUANTITY SENSOR
2843 FUEL TEMPERATURE INDICATING
2844 FUEL PRESSURE INDICATOR

29 HYDRAULIC POWER

2900 HYDRAULIC POWER SYSTEM
2910 HYDRAULIC, MAIN SYSTEM
2911 HYDRAULIC POWER-ACCUMULATOR-MAIN
2912 HYDRAULIC FILTER-MAIN SYSTEM
2913 HYDRAULIC PUMP. ELECT-ENG.-MAIN
2914 HYDRAULIC HANDPUMP-MAIN
2915 HYDRAULIC PRESSURE RELIEF VLV-MAIN
2916 HYDRAULIC RESERVOIR-MAIN
2917 HYDRAULIC PRESSURE REGULATOR-MAIN
2920 HYDRAULIC, AUXILIARY SYSTEM
2921 HYDRAULIC ACCUMULATOR-AUXILIARY
2922 HYDRAULIC FILTER-AUXILIARY
2923 HYDRAULIC PUMP-AUXILIARY
2925 HYDRAULIC PRESSURE RELIEF-AUXILIARY
2926 HYDRAULIC RESERVOIR-AUXILIARY
2927 HYDRAULIC PRESSURE REGULATOR-AUX.
2930 HYDRAULIC SYSTEM INDICATING
2931 HYDRAULIC PRESSURE INDICATOR
2932 HYDRAULIC PRESSURE SENSOR
2933 HYDRAULIC QUANTITY INDICATOR
2934 HYDRAULIC QUANTITY SENSOR

30 ICE AND RAIN PROTECTION

3000 ICE/RAIN PROTECTION SYSTEM
3010 AIRFOIL ANTI/DE-ICE SYSTEM
3020 AIR INTAKE ANTI/DE-ICE SYSTEM
3030 PITOT/STATIC ANTI-ICE SYSTEM
3040 WINDSHIELD/DOOR RAIN/ICE REMOVAL
3050 ANTENNA/RADOME ANTI-ICE/DE-ICE SYSTEM
3060 PROP/ROTOR ANTI-ICE/DE-ICE SYSTEM
3070 WATER LINE ANTI-ICE SYSTEM
3080 ICE DETECTION

31 INSTRUMENTS

3100 INDICATING/RECORDING SYSTEM
3110 INSTRUMENT PANEL
3120 INDEPENDENT INSTRUMENTS (CLOCK, ETC.)
3130 DATA RECORDERS (FLT/MAINT)
3140 CENTRAL COMPUTERS (EICAS)
3150 CENTRAL WARNING
3160 CENTRAL DISPLAY
3170 AUTOMATIC DATA

32 LANDING GEAR

3200 LANDING GEAR SYSTEM
3201 LANDING GEAR/WHEEL FAIRING
3210 MAIN LANDING GEAR
3211 MAIN LANDING GEAR ATTACH SECTION
3212 EMERGENCY FLOTATION SECTION
3213 MAIN LANDING GEAR STRUT/AXLE/TRUCK
3220 NOSE/TAIL LANDING GEAR
3221 NOSE/TAIL LANDING GEAR ATTACH SECTION
3222 NOSE/TAIL LANDING GEAR STRUT/AXLE
3230 LANDING GEAR RETRACT/EXT. SYSTEM
3231 LANDING GEAR DOOR RETRACT SECTION
3232 LANDING GEAR DOOR ACTUATOR
3233 LANDING GEAR ACTUATOR
3234 LANDING GEAR SELECTOR
3240 LANDING GEAR BRAKE SYSTEM
3241 BRAKE ANTI-SKID SECTION
3242 BRAKE
3243 MASTER CYL/BRAKE VALVE
3244 TIRE
3245 TIRE TUBE
3246 WHEEL/SKI/FLOAT
3250 LANDING GEAR STEERING SYSTEM
3251 STEERING UNIT
3252 SHIMMY DAMPER
3260 LANDING GEAR POSITION & WARNING
3270 AUXILIARY GEAR (TAIL SKID)

33 LIGHTS

3300 LIGHTING SYSTEM
3310 FLIGHT COMPARTMENT LIGHTING
3320 PASSENGER COMPARTMENT LIGHTING
3330 CARGO COMPARTMENT LIGHTING
3340 EXTERIOR LIGHTING
3350 EMERGENCY LIGHTING

34 NAVIGATION

3400 NAVIGATION SYSTEM
3410 FLIGHT ENVIRONMENT DATA
3411 PITOT/STATIC SYSTEM
3412 OUTSIDE AIR TEMP. IND./SENSOR
3413 RATE OF CLIMB INDICATOR
3414 AIRSPEED/MACH INDICATING
3415 HIGH SPEED WARNING
3416 ALTIMETER, BAROMETRIC/ENCODER

34 NAVIGATION CONT'D

3417 AIR DATA COMPUTER
3418 STALL WARNING SYSTEM
3420 ATTITUDE AND DIRECTION DATA SYSTEM
3421 ATTITUDE GYRO & IND. SYSTEM
3422 DIRECTIONAL GYRO & IND. SYSTEM
3423 MAGNETIC COMPASS
3424 TURN & BANK/RATE OF TURN INDICATOR
3425 INTEGRATED FLT. DIRECTOR SYSTEM
3430 LANDING & TAXI AIDS
3431 LOCALIZER/VOR SYSTEM
3432 GLIDE SLOPE SYSTEM
3433 MICROWAVE LANDING SYSTEM
3434 MARKER BEACON SYSTEM
3435 HEADS UP DISPLAY SYSTEM
3436 WIND SHEAR DETECTION SYSTEM
3440 INDEPENDENT POS. DETERMINING SYSTEM
3441 INERTIAL GUIDANCE SYSTEM
3442 WEATHER RADAR SYSTEM
3443 DOPPLER SYSTEM
3444 GROUND PROXIMITY SYSTEM
3445 AIR COLLISION AVOIDANCE SYSTEM (TCAS)
3446 NON RADAR WEATHER SYSTEM
3450 DEPENDENT POSITION DETERMINING SYSTEM
3451 DME/TACAN SYSTEM
3452 ATC TRANSPONDER SYSTEM
3453 LORAN SYSTEM
3454 VOR SYSTEM
3455 ADF SYSTEM
3456 OMEGA NAVIGATION SYSTEM
3457 GLOBAL POSITIONING SYSTEM
3460 FLIGHT MANAGE. COMPUTING SYSTEM

35 OXYGEN

3500 OXYGEN SYSTEM
3510 CREW OXYGEN SYSTEM
3520 PASSENGER OXYGEN SYSTEM
3530 PORTABLE OXYGEN SYSTEM

36 PNEUMATIC

3600 PNEUMATIC SYSTEM
3610 PNEUMATIC DISTRIBUTION SYSTEM
3620 PNEUMATIC INDICATING SYSTEM

37 VACUUM

3700 VACUUM SYSTEM
3710 VACUUM DISTRIBUTION SYSTEM
3720 VACUUM INDICATING SYSTEM

38 WATER/WASTE

3800 WATER & WASTE SYSTEM
3810 POTABLE WATER SYSTEM
3820 WASH WATER SYSTEM
3830 WASTE DISPOSAL SYSTEM
3840 AIR SUPPLY (WATER PRESS. SYSTEM)

45 CENTRAL MAINT. SYSTEM

4500 CENTRAL MAINT. COMPUTER

49 AIRBORNE AUXILIARY POWER

4900 AIRBORNE APU SYSTEM
4910 APU COWLING/CONTAINMENT
4920 APU CORE ENGINE
4930 APU ENGINE FUEL & CONTROL
4940 APU START/IGNITION SYSTEM
4950 APU BLEED AIR SYSTEM
4960 APU CONTROLS
4970 APU INDICATING SYSTEM
4980 APU EXHAUST SYSTEM
4990 APU OIL SYSTEM

51 STANDARD PRACTICES/STRUCTURES

5100 STANDARD PRACTICES/STRUCTURES
5101 AIRCRAFT STRUCTURES
5102 BALLOON REPORTS

52 DOORS

5200 DOORS
5210 PASSENGER/CREW DOORS
5220 EMERGENCY EXIT
5230 CARGO/BAGGAGE DOORS
5240 SERVICE DOORS
5241 GALLEY DOORS
5242 E/E COMPARTMENT DOORS
5243 HYDRAULIC COMPARTMENT DOORS
5244 ACCESSORY COMPARTMENT DOORS
5245 AIR CONDITIONING COMPART. DOORS
5246 FLUID SERVICE DOORS

5247 APU DOORS
5248 TAIL CONE DOORS
5250 FIXED INNER DOORS
5260 ENTRANCE STAIRS
5270 DOOR WARNING SYSTEM
5280 LANDING GEAR DOORS

53 FUSELAGE

5300 FUSELAGE STRUCTURE (GENERAL)
5301 AERIAL TOW EQUIPMENT
5302 ROTORCRAFT TAIL BOOM
5310 FUSELAGE MAIN STRUCTURE
5311 FUSELAGE MAIN FRAME
5312 FUSELAGE MAIN BULKHEAD
5313 FUSELAGE MAIN LONGERON/STRINGER
5314 FUSELAGE MAIN KEEL
5315 FUSELAGE MAIN FLOOR BEAM
5320 FUSELAGE MISCELLANEOUS STRUCTURE
5321 FUSELAGE FLOOR PANEL
5322 FUSELAGE INTERNAL MOUNT STRUCTURE
5323 FUSELAGE INTERNAL STAIRS
5324 FUSELAGE FIXED PARTITIONS
5330 FUSELAGE MAIN PLATE/SKIN
5340 FUSELAGE MAIN ATTACH FITTINGS
5341 WING ATTACH FITTINGS (ON FUSELAGE)
5342 STABILIZER ATTACH FITTINGS
5343 LANDING GEAR ATTACH FITTINGS
5344 FUSELAGE DOOR HINGES
5345 FUSELAGE EQUIPMENT ATTACH FITTINGS
5346 POWERPLANT ATTACH FITTINGS
5347 SEAT/CARGO ATTACH FITTINGS
5350 FUSELAGE AERODYNAMIC FAIRINGS

54 NACELLES/PYLONS

5400 NACELLE/PYLON STRUCTURE
5410 MAIN FRAME (ON NACELLE/PYLON)
5411 FRAME/SPAR/RIB(NACELLE/PYLON)
5412 BULKHEAD/FIREWALL (NAC/PYLON)
5413 LONGERON/STRINGER (NAC/PYLON)
5414 PLATE SKIN (NAC/PYLONS)
5415 ATTACH FITTINGS (NAC/PYLON)

55 STABILIZERS

5500 EMPENNAGE STRUCTURE
5510 HORIZONTAL STABILIZER STRUCTURE
5511 HORIZONTAL STABILIZER SPAR/RIB
5512 HORIZONTAL STABILIZER PLATE/SKIN
5513 HORIZONTAL STABILIZER TAB STRUCTURE
5520 ELEVATOR STRUCTURE

55 STABILIZERS CONT'D

5521 ELEVATOR SPAR/RIB STRUCTURE
5522 ELEVATOR PLATES/SKIN STRUCTURE
5523 ELEVATOR TAB STRUCTURE
5530 VERTICAL STABILIZER STRUCTURE
5531 VERTICAL STABILIZER SPAR/RIB STRUCTURE
5532 VERTICAL STABILIZER PLATES/SKIN
5533 VENTRAL STRUCTURE (ON VERT. STAB)
5540 RUDDER STRUCTURE
5541 RUDDER SPAR/RIB STRUCTURE
5542 RUDDER PLATE/SKIN STRUCTURE
5543 RUDDER TAB STRUCTURE
5550 EMPENNAGE FLT. CONT. ATTACH FITTING
5551 HORIZONTAL STABILIZER ATTACH FITTING
5552 ELEVATOR/TAB ATTACH FITTINGS
5553 VERT. STAB. ATTACH FITTINGS
5554 RUDDER/TAB ATTACH FITTINGS

56 WINDOWS

5600 WINDOW/WINDSHIELD SYSTEM
5610 FLIGHT COMPARTMENT WINDOWS
5620 PASSENGER COMPARTMENT WINDOWS
5630 DOOR WINDOWS
5640 INSPECTION WINDOWS

57 WINGS

5700 WING STRUCTURE
5710 WING MAIN FRAME STRUCTURE
5711 WING SPAR STRUCTURE
5712 WING RIB STRUCTURE
5713 WING LONGERON/STRINGER
5714 WING CENTER BOX
5720 WING MISCELLANEOUS STRUCTURE
5730 WING PLATES/SKINS
5740 WING ATTACH FITTINGS
5741 WING, FUSELAGE ATTACH FITTINGS
5742 WING, NAC/PYLON ATTACH FITTINGS
5743 WING, LANDING GEAR ATTACH FITTINGS
5744 CONTROL SURFACE ATTACH FITTINGS
5750 WING CONTROL SURFACE STRUCTURE
5751 AILERON STRUCTURE
5752 AILERON TAB STRUCTURE
5753 TE FLAP STRUCTURE
5754 LEADING EDGE DEVICE STRUCTURE
5755 SPOILER STRUCTURE

61 PROPELLERS/PROPULSORS

6100 PROPELLER SYSTEM
6110 PROPELLER ASSEMBLY
6111 PROPELLER BLADE SECTION
6112 PROPELLER DE-ICE BOOT SECTION
6113 PROPELLER SPINNER SECTION
6114 PROPELLER HUB SECTION
6120 PROPELLER CONTROL SYSTEM
6121 PROPELLER SYNCHRONIZER SECTION
6122 PROPELLER GOVERNOR
6123 PROPELLER FEATHERING/REVERSING
6130 PROPELLER BRAKING
6140 PROPELLER INDICATING SYSTEM

62 MAIN ROTOR

6200 MAIN ROTOR SYSTEM
6210 MAIN ROTOR BLADES
6220 MAIN ROTOR HEAD
6230 MAIN ROTOR MAST/SWASHPLATE
6240 MAIN ROTOR INDICATING SYSTEM

63 MAIN ROTOR DRIVE

6300 MAIN ROTOR DRIVE SYSTEM
6310 ENGINE/TRANSMISSION COUPLING
6320 MAIN ROTOR GEARBOX
6321 MAIN ROTOR BRAKE
6322 ROTORCRAFT COOLING FAN SYSTEM
6330 MAIN ROTOR TRANSMISSION MOUNT
6340 ROTOR DRIVE INDICATING SYSTEM

64 TAIL ROTOR

6400 TAIL ROTOR SYSTEM
6410 TAIL ROTOR BLADE
6420 TAIL ROTOR HEAD
6440 TAIL ROTOR INDICATING SYSTEM

65 TAIL ROTOR DRIVE

6500 TAIL ROTOR DRIVE SYSTEM
6510 TAIL ROTOR DRIVE SHAFT
6520 TAIL ROTOR GEARBOX
6540 TAIL ROTOR DRIVE INDICATING SYSTEM

67 ROTORS FLIGHT CONTROL

6700 ROTORCRAFT FLIGHT CONTROL
6710 MAIN ROTOR CONTROL
6711 TILT ROTOR FLIGHT CONTROL
6720 TAIL ROTOR CONTROL SYSTEM
6730 ROTORCRAFT SERVO SYSTEM

71 POWERPLANT

7100 POWERPLANT SYSTEM
7110 ENGINE COWLING SYSTEM
7111 COWL FLAP SYSTEM
7112 ENGINE AIR BAFFLE SECTION
7120 ENGINE MOUNT SECTION
7130 ENGINE FIRESEALS
7160 ENGINE AIR INTAKE SYSTEM
7170 ENGINE DRAINS

72 TURBINE/TURBOPROP ENGINE

7200 ENGINE (TURBINE/TURBOPROP)
7210 TURBINE ENGINE REDUCTION GEAR
7220 TURBINE ENGINE AIR INLET SECTION
7230 TURBINE ENGINE COMPRESSOR SECTION
7240 TURBINE ENGINE COMBUSTION SECTION
7250 TURBINE SECTION
7260 TURBINE ENGINE ACCESSORY DRIVE
7261 TURBINE ENGINE OIL SYSTEM
7270 TURBINE ENGINE BYPASS SECTION

73 ENGINE FUEL & CONTROL

7300 ENGINE FUEL & CONTROL
7310 ENGINE FUEL DISTRIBUTION
7311 ENGINE FUEL-OIL COOLER
7312 FUEL HEATER
7313 FUEL INJECTOR NOZZLE
7314 ENGINE FUEL PUMP
7320 FUEL CONTROLLING SYSTEM
7321 FUEL CONTROL/ELECTRONIC
7322 FUEL CONTROL/CARBURETOR
7323 TURBINE GOVERNOR
7324 FUEL DIVIDER
7330 ENGINE FUEL INDICATING SYSTEM
7331 FUEL FLOW INDICATING
7332 FUEL PRESSURE INDICATING
7333 FUEL FLOW SENSOR
7334 FUEL PRESSURE SENSOR

74 IGNITION

7400 IGNITION SYSTEM
7410 IGNITION POWER SUPPLY
7411 LOW TENSION COIL
7412 EXCITER
7413 INDUCTION VIBRATOR
7414 MAGNETO/DISTRIBUTOR
7420 IGNITION HARNESS (DISTRIBUTION)
7421 SPARK PLUG/IGNITER
7430 IGNITION SWITCHING

75 AIR

7500 ENGINE BLEED AIR SYSTEM
7510 ENGINE ANTI-ICING SYSTEM
7520 ENGINE COOLING SYSTEM
7530 COMPRESSOR BLEED CONTROL
7531 COMPRESSOR BLEED GOVERNOR
7532 COMPRESSOR BLEED VALVE
7540 BLEED AIR INDICATING SYSTEM

76 ENGINE CONTROLS

7600 ENGINE CONTROLS
7601 ENGINE SYNCHRONIZING
7602 MIXTURE CONTROL
7603 POWER LEVER
7620 ENGINE EMERGENCY SHUTDOWN SYSTEM

77 ENGINE INDICATING

7700 ENGINE INDICATING SYSTEM
7710 POWER INDICATING SYSTEM
7711 ENGINE PRESSURE RATIO (EPR)
7712 ENGINE BMEP/TORQUE INDICATING
7713 MANIFOLD PRESSURE (MP) INDICATING
7714 ENGINE RPM INDICATING SYSTEM
7720 ENGINE TEMP. INDICATING SYSTEM
7721 CYLINDER HEAD TEMP (CHT) INDICATING
7722 ENG. EGT/TIT INDICATING SYSTEM
7730 ENGINE IGNITION ANALYZER SYSTEM
7731 ENGINE IGNITION ANALYZER
7732 ENGINE VIBRATION ANALYZER
7740 ENGINE INTEGRATED INSTRUMENT SYSTEM

78 ENGINE EXHAUST

7800 ENGINE EXHAUST SYSTEM
7810 ENGINE COLLECTOR/TAILOPIPE/NOZZLE
7820 ENGINE NOISE SUPPRESSOR
7830 THRUST REVERSER

79 ENGINE OIL

7900 ENGINE OIL SYSTEM (AIRFRAME)
7910 ENGINE OIL STORAGE (AIRFRAME)
7920 ENGINE OIL DISTRIBUTION (AIRFRAME)
7921 ENGINE OIL COOLER
7922 ENGINE OIL TEMP. REGULATOR
7923 OIL SHUTOFF VALVE
7930 ENGINE OIL INDICATING SYSTEM
7931 ENGINE OIL PRESSURE
7932 ENGINE OIL QUANTITY
7933 ENGINE OIL TEMPERATURE

80 STARTING

8000 ENGINE STARTING SYSTEM
8010 ENGINE CRANKING
8011 ENGINE STARTER
8012 ENGINE START VALVES/CONTROLS

81 TURBOCHARGING

8100 EXHAUST TURBINE SYSTEM (RECIP)
8110 POWER RECOVERY TURBINE (RECIP)
8120 EXHAUST TURBOCHARGER

82 WATER INJECTION

8200 WATER INJECTION SYSTEM

83 ACCESSORY GEARBOXES

8300 ACCESSORY GEARBOXES

85 RECIPROCATING ENGINE

8500 ENGINE (RECIPROCATING)
8510 RECIPROCATING ENGINE FRONT SECTION
8520 RECIPROCATING ENGINE POWER SECTION

8530 RECIPROCATING ENGINE CYLINDER SECTION
8540 RECIPROCATING ENGINE REAR SECTION
8550 RECIPROCATING ENGINE OIL SYSTEM

MECHANICS CREED

UPON MY HONOR I swear that I shall hold in sacred trust the rights and privileges conferred upon me as a certified mechanic. Knowing full well that the safety and lives of others are dependent upon my skill and judgment, I shall never knowingly subject others to risks which I would not be willing to assume for myself, or for those dear to me.

IN DISCHARGING this trust, I pledge myself never to undertake work or approve work which I feel to be beyond the limits of my knowledge; nor shall I allow any non-certificated superior to persuade me to approve aircraft or equipment as airworthy against my better judgment; nor shall I permit my judgment to be influenced by money or other personal gain; nor shall I pass as airworthy aircraft or equipment about which I am in doubt, either as a result of direct inspection or uncertainty regarding the ability of others who have worked on it to accomplish their work satisfactorily.

I REALIZE the grave responsibility which is mine as a certified airman, to exercise my judgment on the airworthiness of aircraft and equipment. I, therefore, pledge unyielding adherence to these precepts for the advancement of aviation and for the dignity of my vocation.